FILE 'REGISTRY' ENTERED AT 12:14:15 ON 20 FEB 2008
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STRUCTURE FILE UPDATES: 19 FEB 2008 HIGHEST RN 1004621-14-0
DICTIONARY FILE UPDATES: 19 FEB 2008 HIGHEST RN 1004621-14-0

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

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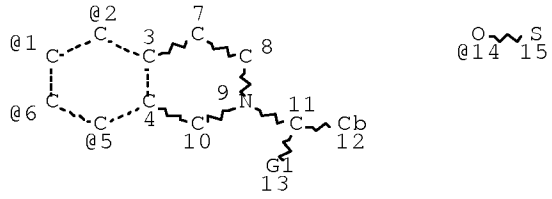
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

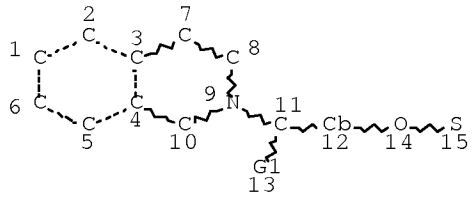
L1 STR



VAR G1=H/O
VPA 14-1/2/5/6 U
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 12
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE
L2 STR



VAR G1=H/O
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 12
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE
L3 28 SEA FILE=REGISTRY SSS FUL L1 OR L2

100.0% PROCESSED 297399 ITERATIONS 28 ANSWERS
SEARCH TIME: 00.00.03

FILE 'CAPLUS' ENTERED AT 12:14:16 ON 20 FEB 2008

FILE COVERS 1907 - 20 Feb 2008 VOL 148 ISS 8
FILE LAST UPDATED: 19 Feb 2008 (20080219/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

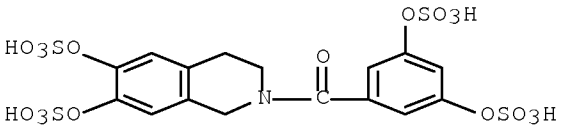
L4 9 L3

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:961513 CAPLUS Full-text
DOCUMENT NUMBER: 147:385413
TITLE: Rapid and efficient microwave-assisted synthesis of highly sulfated organic scaffolds
AUTHOR(S): Raghuraman, Arjun; Riaz, Muhammad; Hindle, Michael; Desai, Umesh R.
CORPORATE SOURCE: Department of Medicinal Chemistry and Institute for Structural Biology and Drug Discovery, Virginia Commonwealth University, Richmond, VA, USA
SOURCE: Tetrahedron Letters (2007), 48(38), 6754-6758
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 147:385413

AB Sulfation of multiple hydroxylated small organic mols. was fraught with problems of poor yield, multitude of products, and long reaction times. The authors developed a rapid microwave-based method for synthesis of highly sulfated small organic mols., which affords the per-sulfated product in moderate to excellent yields and high purity. The method was expected of value in the discovery of per-sulfated organic mols. as mimics of glycosaminoglycans, which are being increasingly recognized as modulators of key physiol. functions.

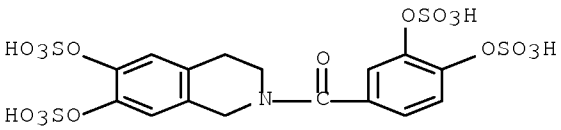
IT 950750-03-5P 950750-04-6P 950750-05-7P
950750-06-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(microwave-assisted preparation of per-sulfated organic mols. by sulfation of polyhydroxy substrates with trimethylamine-sulfur trioxide complex)

RN 950750-03-5 CAPLUS
CN Methanone, [3,5-bis(sulfooxy)phenyl][3,4-dihydro-6,7-bis(sulfooxy)-2(1H)-isoquinolinyl]-, sodium salt (1:4) (CA INDEX NAME)



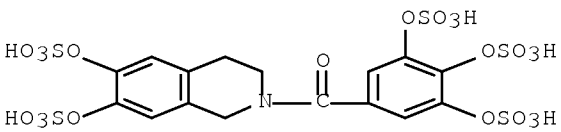
4 Na

RN 950750-04-6 CAPLUS
CN Methanone, [3,4-bis(sulfooxy)phenyl][3,4-dihydro-6,7-bis(sulfooxy)-2(1H)-isoquinolinyl]-, sodium salt (1:4) (CA INDEX NAME)



4 Na

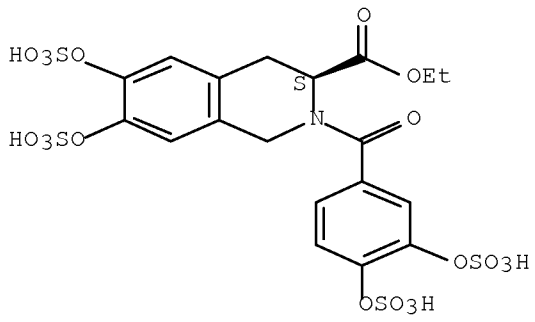
RN 950750-05-7 CAPLUS
CN Methanone, [3,4-dihydro-6,7-bis(sulfooxy)-2(1H)-isoquinolinyl][3,4,5-tris(sulfooxy)phenyl]-, sodium salt (1:5) (CA INDEX NAME)



5 Na

RN 950750-06-8 CAPLUS
CN 3-Isoquinolinecarboxylic acid, 2-[3,4-bis(sulfooxy)benzoyl]-1,2,3,4-tetrahydro-6,7-bis(sulfooxy)-, 3-ethyl ester, sodium salt (1:4), (3S)- (CA INDEX NAME)

Absolute stereochemistry.



●4 Na

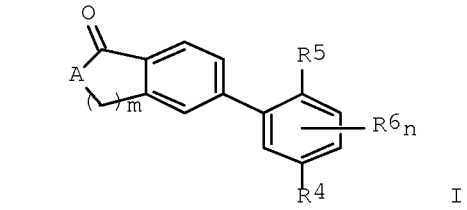
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:14480 CAPLUS Full-text
DOCUMENT NUMBER: 146:121821
TITLE: Preparation of bicyclic derivatives as p38 kinase inhibitors
INVENTOR(S): Almansa Rosales, Carmen; Virgili Bernado, Marina
PATENT ASSIGNEE(S): J. Uriach y Compania S.A., Spain
SOURCE: PCT Int. Appl., 80pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007000339	A1	20070104	WO 2006-EP6255	20060628
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2006263961	A1	20070104	AU 2006-263961	20060628
PRIORITY APPLN. INFO.:			EP 2005-380140 A	20050629

WO 2006-EP6255 W 20060628

OTHER SOURCE(S): MARPAT 146:121821
GI



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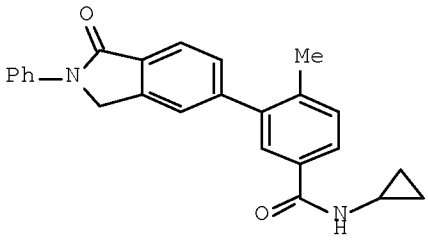


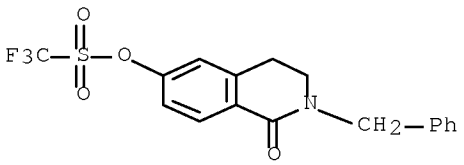
II

AB Title compds. represented by the formula I [wherein A = CR1R2 or NR3; R1, R2 = alkyl; R3, R8 = independently -(CH2)p-Cy1 or (un)substituted alkyl; m = 1 or 2; R4 = -B-R8; R5 = H, halo, alkyl or alkoxy; R6 = halo or Me; p = 0-2; Cy1 = (un)substituted Ph, heteroaryl, cycloalkyl or heterocyclyl; B = -CONR9-, -NR9CO- or -NR9CONR9-; R9 = H or alkyl; or salts thereof] were prepared as p38 kinase inhibitors. For example, II was provided in a multi-step synthesis starting from 4-bromo-2-methylbenzoic acid. I showed more than 50 % inhibition for p38α enzyme activity at 10 μM. Thus, I are useful for the treatment of p38 kinase mediated diseases, such as immune diseases.

IT 918330-09-3P, 2-Benzyl-1-oxo-1,2,3,4-tetrahydroisoquinolin-6-yl trifluoromethanesulfonate
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of bicyclic derivs. as p38 kinase inhibitors)

RN 918330-09-3 CAPLUS

CN Methanesulfonic acid, 1,1,1-trifluoro-, 1,2,3,4-tetrahydro-1-oxo-2-(phenylmethyl)-6-isoquinolinyl ester (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:13562 CAPLUS Full-text
DOCUMENT NUMBER: 146:121696
TITLE: Preparation of bicyclic derivatives as p38 kinase inhibitors
INVENTOR(S): Almansa, Rosales Carmen; Virgili, Bernardo Marina
PATENT ASSIGNEE(S): J. Uriach y Compania S.A., Spain
SOURCE: PCT Int. Appl., 62pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

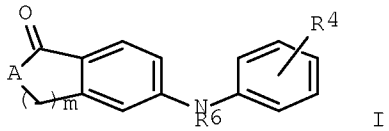
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007000337	A1	20070104	WO 2006-EP6253	20060628
WO 2007000337	A8	20070419		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: EP 2005-380142 A 20050629

OTHER SOURCE(S): MARPAT 146:121696
GI



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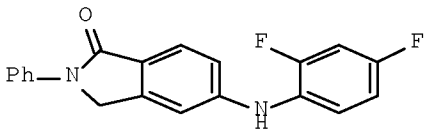


II

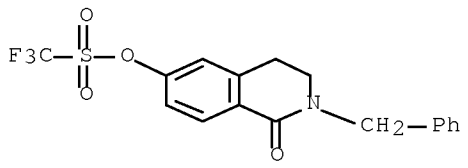
AB Title compds. represented by the formula I [wherein A = CR1R2 or NR3; R1, R2 = H or alkyl; R3 = -(CH2)p-Cy1 or (hydroxy)alkyl; m = 1 or 2; R4 = H, halo, (halo)alkyl, etc.; p = 0-2; Cy1 = (un)substituted Ph, heteroaryl or cycloalkyl; R6 = H or (un)substituted alkyl; or salts thereof] were prepared as p38 kinase inhibitors. For example, II was provided in a multi-step synthesis starting from 4-bromo-2- methylbenzoic acid. I showed more than 50

% inhibition for p38α enzyme activity at 10 μM. Thus, I are useful for the treatment of p38 kinase mediated diseases, such as immune diseases.

IT 918330-09-3P, 2-Benzyl-1-oxo-1,2,3,4-tetrahydroisoquinolin-6-yl trifluoromethanesulfonate
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of bicyclic derivs. as p38 kinase inhibitors)

RN 918330-09-3 CAPLUS

CN Methanesulfonic acid, 1,1,1-trifluoro-, 1,2,3,4-tetrahydro-1-oxo-2-(phenylmethyl)-6-isoquinolinyl ester (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1174217 CAPLUS Full-text

DOCUMENT NUMBER: 144:69994

TITLE: Synthesis of (R)-(-)-2-fluoronorapomorphine - a precursor for the synthesis of (R)-(-)-2-fluoro-N-[11C]propylnorapomorphine for evaluation as a dopamine D2 agonist ligand for PET investigations

AUTHOR(S): Soendergaard, Kaare; Kristensen, Jesper Langgaard; Gillings, Nic; Begtrup, Mikael

CORPORATE SOURCE: Institute for Medicinal Chemistry, The Danish University of Pharmaceutical Sciences, Copenhagen, 2100, Den.

SOURCE: European Journal of Organic Chemistry (2005), (20), 4428-4433
CODEN: EJOCFK; ISSN: 1434-193X

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 144:69994

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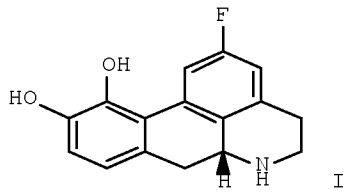


I

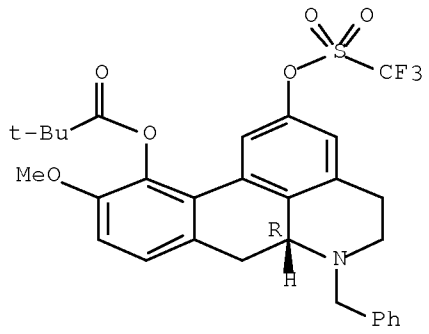
AB 2-Fluoronorapomorphine (I), the PET labeling precursor to 2-fluoro-N-[11C]propylnorapomorphine, was prepared in 13 steps from codeine in a total yield of 10%. Codeine was converted in four steps into N-benzylnorcodeine which was oxidized by using the Swern protocol. Subsequent acid-catalyzed rearrangement afforded N-benzylnormorphothebaine which was selectively triflylated at the 2-position and pivaloylated at the 11-position. The triflate underwent palladium catalyzed amination with benzophenone imine. Amination conditions required sequential base addition to give substantial conversion of the triflate to the corresponding N-substituted benzophenone imine. After acidic hydrolysis the resulting aniline was transformed into the 2-fluoro compound via the Balz-Schiemann reaction. Hydrogenolysis of the N-benzyl group followed by deprotection of the catechol moiety using BBr3 provided 2-fluoronorapomorphine.

IT 871671-12-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of (R)-(-)-2-fluoronorapomorphine as precursor for synthesis of (R)-(-)-2-fluoro-N-[11C]propylnorapomorphine for evaluation as a dopamine D2 agonist ligand for PET investigations)

RN 871671-12-4 CAPLUS

CN Propanoic acid, 2,2-dimethyl-, (6aR)-5,6,6a,7-tetrahydro-10-methoxy-6-(phenylmethyl)-2-[[(trifluoromethyl)sulfonyl]oxy]-4H-dibenzo[de,g]quinolin-11-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:1037066 CAPLUS Full-text
DOCUMENT NUMBER: 142:718
TITLE: Sulfated bis-cyclic agents
INVENTOR(S): Desai, Umesh R.; Gunnarsson, Gunnar
PATENT ASSIGNEE(S): Virginia Commonwealth University, USA
SOURCE: PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2004103961 A2 20041202 WO 2004-US15731 20040519
WO 2004103961 A3 20050414
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
US 2007173529 A1 20070726 US 2006-556906 20060926
PRIORITY APPLN. INFO.: US 2003-471346P P 20030519
WO 2004-US15731 W 20040519

OTHER SOURCE(S): MARPAT 142:718

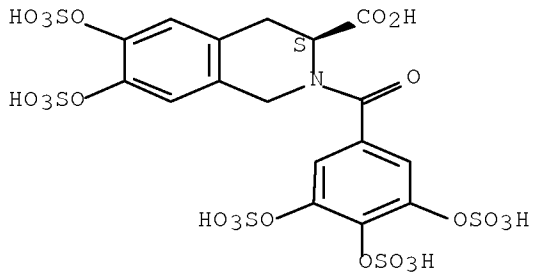
AB Sulfated bis-cyclic compds. that are potent anticoagulants and methods for their manufacture are provided. The sulfated compds. are bis-cyclic moieties comprised of an isoquinoline ring joined to a Ph ring. Counterions such as sodium may also be coordinated to the sulfate and carboxylate moieties.

IT 797057-36-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(sulfated bis-cyclic agents as anticoagulants)

RN 797057-36-4 CAPLUS

CN 3-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-6,7-bis(sulfooxy)-2-[3,4,5-tris(sulfooxy)benzoyl]-, (3S)- (CA INDEX NAME)

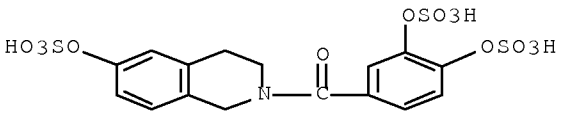
Absolute stereochemistry.



IT 797057-27-3D, derivs. 797057-28-4D, derivs.
797057-29-5D, derivs. 797057-30-8
797057-31-9D, derivs. 797057-32-0D, derivs.
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sulfated bis-cyclic agents as anticoagulants)

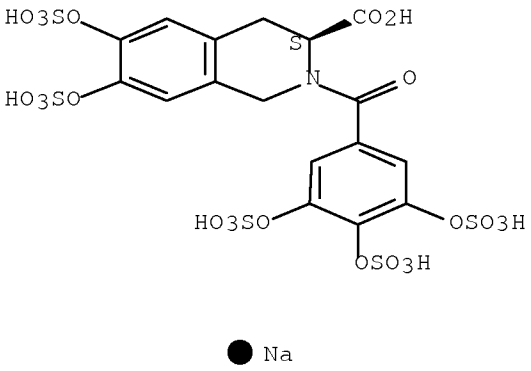
RN 797057-27-3 CAPLUS

CN Isoquinoline, 2-[3,4-bis(sulfooxy)benzoyl]-1,2,3,4-tetrahydro-6-(sulfooxy)- (9CI) (CA INDEX NAME)



RN 797057-28-4 CAPLUS
CN 3-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-6,7-bis(sulfooxy)-2-[3,4,5-tris(sulfooxy)benzoyl]-, monosodium salt, (3S)- (9CI) (CA INDEX NAME)

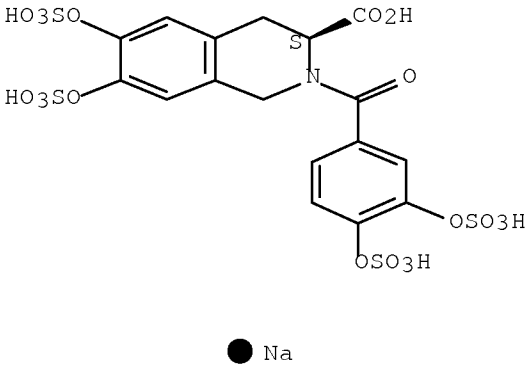
Absolute stereochemistry.



Na

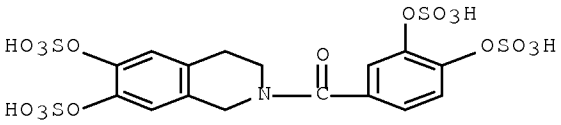
RN 797057-29-5 CAPLUS
CN 3-Isoquinolinecarboxylic acid, 2-[3,4-bis(sulfooxy)benzoyl]-1,2,3,4-tetrahydro-6,7-bis(sulfooxy)-, monosodium salt, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



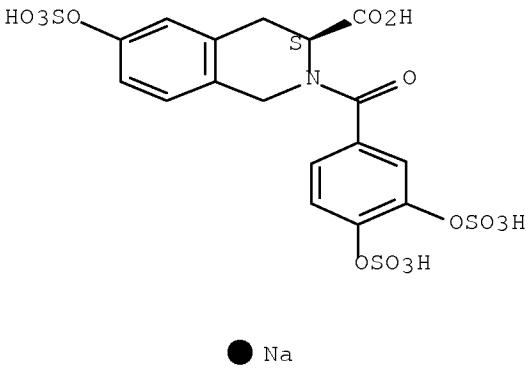
Na

RN 797057-30-8 CAPLUS
CN Isoquinoline, 2-[3,4-bis(sulfooxy)benzoyl]-1,2,3,4-tetrahydro-6,7-bis(sulfooxy)- (9CI) (CA INDEX NAME)



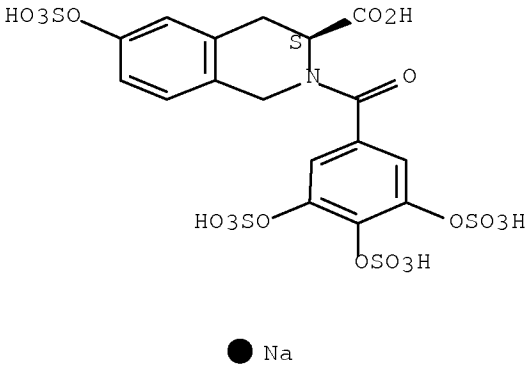
RN 797057-31-9 CAPLUS
CN 3-Isoquinolinecarboxylic acid, 2-[3,4-bis(sulfooxy)benzoyl]-1,2,3,4-tetrahydro-6-(sulfooxy)-, monosodium salt, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



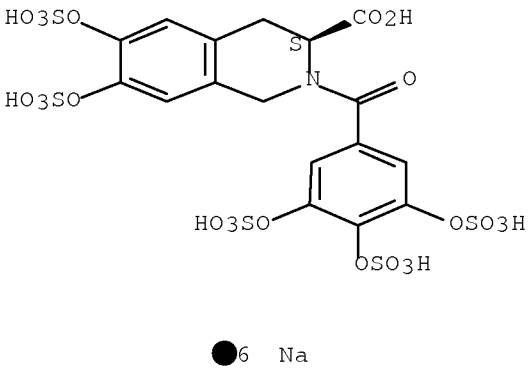
RN 797057-32-0 CAPLUS
CN 3-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-6-(sulfooxy)-2-[3,4,5-tris(sulfooxy)benzoyl]-, monosodium salt, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 797057-35-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(sulfated bis-cyclic agents as anticoagulants)
RN 797057-35-3 CAPLUS
CN 3-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-6,7-bis(sulfooxy)-2-[3,4,5-tris(sulfooxy)benzoyl]-, hexasodium salt, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:965225 CAPLUS Full-text
DOCUMENT NUMBER: 141:410825
TITLE: Preparation of acyl isoindoline derivatives and acyl isoquinoline derivatives as anti-viral agents
INVENTOR(S): Bravi, Gianpaolo; Corfield, John Andrew; Haigh, David; Lovegrove, Victoria Lucy Helen; Shah, Pritom; Slater, Martin John
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004096774	A1	20041111	WO 2004-EP4660	20040429
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.:	GB 2003-10065	A	20030501
	GB 2003-10067	A	20030501
	GB 2003-10069	A	20030501

OTHER SOURCE(S): MARPAT 141:410825
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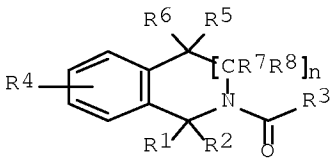

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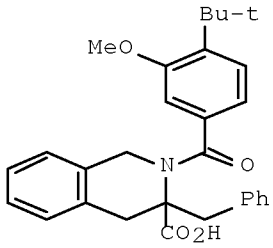
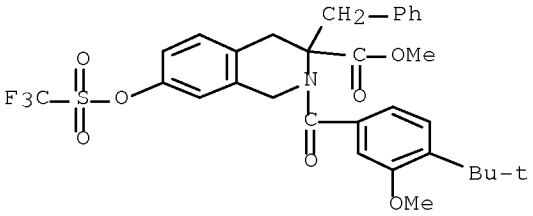


II

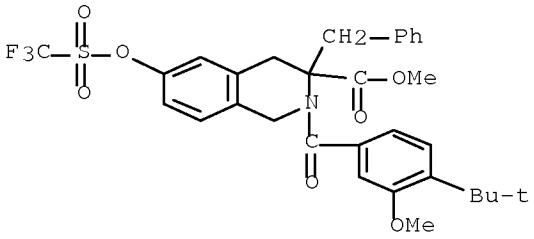
AB The title compds. [I; R3 = (hetero)aryl; R4 = H, alkyl, halo, heteroaryl, aryl, etc.; R5, R6 = H, alkyl, aryl, heteroaryl, arylalkyl, or heteroarylalkyl; n = 0-1; when n = 0, R1 = C(O)RH and R2 = alkyl, heterocyclylalkyl, arylalkyl or heteroarylalkyl; when n = 1, either (i) R1 = C(O)RH, R2 = alkyl, heterocyclylalkyl, arylalkyl or heteroarylalkyl; and R7 and R8 = H, alkyl, aryl, heteroaryl, arylalkyl, or heteroarylalkyl; or (ii) R1 and R2 = H, alkyl, aryl, heteroaryl, arylalkyl, or heteroarylalkyl; R7 = C(O)RH; and R8 = alkyl, heterocyclylalkyl, arylalkyl or heteroarylalkyl; RH = OH, (un)substituted NH2, with proviso], useful as antiviral agents, were prepared E.g., a multi-step synthesis of II, starting from phenylalanine tert-Bu ester hydrochloride and 4-chlorobenzaldehyde, was given. Exemplified compds. I had an IC50 of <25 μM in in vitro HCV RNA-dependent RNA polymerase assay. Processes for preparation and methods of using the compds. I in HCV treatment are provided. The pharmaceutical formulation comprising the compound I is also disclosed.

IT 791822-35-0P 791822-47-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of acyl isoindoline derivs. and acyl isoquinoline derivs. as antiviral agents)

RN 791822-35-0 CAPLUS
CN 3-Isoquinolinecarboxylic acid, 2-[4-(1,1-dimethylethyl)-3-methoxybenzoyl]-1,2,3,4-tetrahydro-3-(phenylmethyl)-7-[[(trifluoromethyl)sulfonyl]oxy]-, methyl ester (CA INDEX NAME)

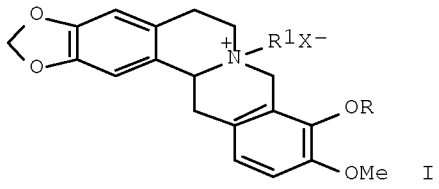


RN 791822-47-4 CAPLUS
CN 3-Isoquinolinecarboxylic acid, 2-[4-(1,1-dimethylethyl)-3-methoxybenzoyl]-1,2,3,4-tetrahydro-3-(phenylmethyl)-6-[[(trifluoromethyl)sulfonyl]oxy]-, methyl ester (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:150983 CAPLUS Full-text
DOCUMENT NUMBER: 141:116418
TITLE: Synthesis and antiarrhythmic activity of protoberberine quaternary ammonium compounds
AUTHOR(S): Zhang, Can; Huang, Wenlong
CORPORATE SOURCE: Center of Drug Discovery, China Pharmaceutical University, Nanjing, 210009, Peop. Rep. China
SOURCE: Zhongguo Yaoke Daxue Xuebao (2003), 34(1), 7-12
CODEN: ZHYXE9; ISSN: 1000-5048
PUBLISHER: Zhongguo Yaoke Daxue
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
OTHER SOURCE(S): CASREACT 141:116418
GI

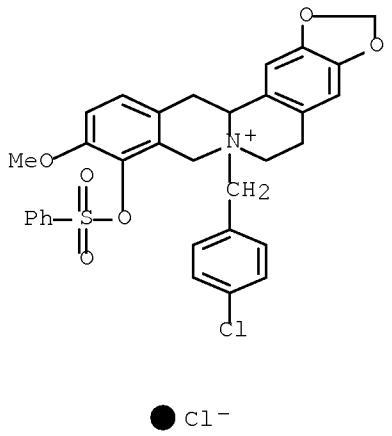


I

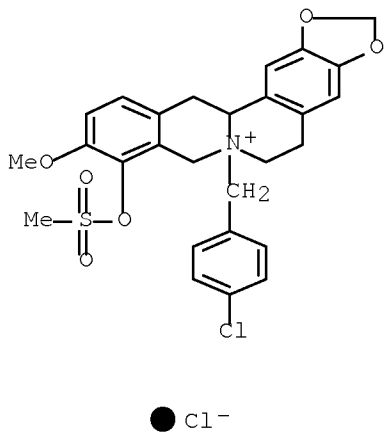
AB A series of new protoberberine quaternary ammonium compds. I (R = H, acetyl, phenylsulfonyl, benzoyl, chlorobenzoyl, or nitrobenzoyl, R' = chlorobenzyl, 2-Et, nitrobenzyl, benzyl, or 2-amino-2-oxoethyl, and halide = Cl or Br) were synthesized from berberine and the antiarrhythmic activity of the target compds. were measured. Twelve protoberberine quaternary ammonium compds. were synthesized, and their structures were confirmed by IR, 1HNMR, MS, and HRMS.

IT 723752-15-6P 723752-16-7P
RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis and antiarrhythmic activity of protoberberine quaternary ammonium compds.)

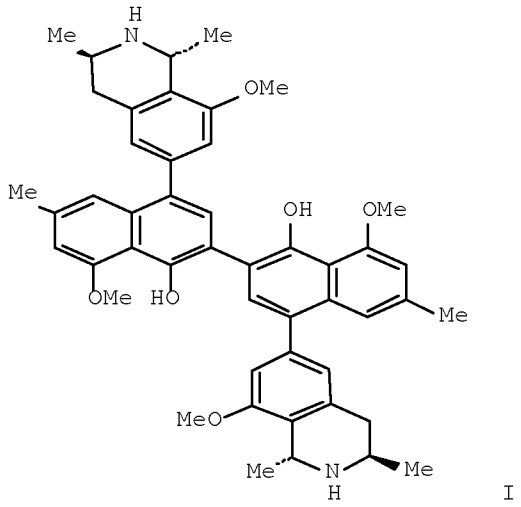
RN 723752-15-6 CAPLUS
CN 6H-Benzo[g]-1,3-benzodioxolo[5,6-a]quinolizinium, 7-[(4-chlorophenyl)methyl]-5,8,13,13a-tetrahydro-10-methoxy-9-[(phenylsulfonyl)oxy]-, chloride (9CI) (CA INDEX NAME)



RN 723752-16-7 CAPLUS
CN 6H-Benzo[g]-1,3-benzodioxolo[5,6-a]quinolizinium, 7-[(4-chlorophenyl)methyl]-5,8,13,13a-tetrahydro-10-methoxy-9-[(methylsulfonyl)oxy]-, chloride (9CI) (CA INDEX NAME)



L4 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:642913 CAPLUS Full-text
DOCUMENT NUMBER: 126:8345
TITLE: Acetogenic isoquinoline alkaloids. 88. Synthesis of pindikamine A, a michellamine-related dimer of a non-natural, 'skew' naphthylisoquinoline
AUTHOR(S): Bringmann, Gerhard; Goetz, Roland; Francois, Guido
CORPORATE SOURCE: Institut fuer Organische Chemie, Universitaet Wuerzburg, Wuerzburg, D-97074, Germany
SOURCE: Tetrahedron (1996), 52(42), 13419-13426
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

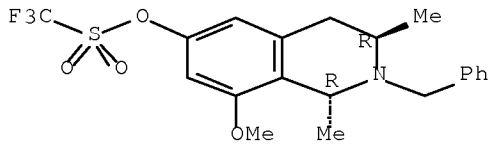
AB The synthesis of an unnatural dimeric naphthylisoquinoline, pindikamine A (I), as a skew analog of antiviral michellamines, is described. Because of the unusual coupling positions, this C2-sym. quateraryl is the first michellamine analog without axial chirality. Key steps of the total synthesis are the preparation of the naphthylisoquinoline precursor by intermol. biaryl coupling, followed by a highly efficient oxidative dimerization and reduction I and its monomeric analog show good antimalarial activity against Plasmodium falciparum in vitro.

IT 177555-90-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and antimalarial activity of pindikamine A and its naphthylisoquinoline monomeric analog)

RN 177555-90-7 CAPLUS

CN Methanesulfonic acid, trifluoro-, 1,2,3,4-tetrahydro-8-methoxy-1,3-dimethyl-2-(phenylmethyl)-6-isoquinolinyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

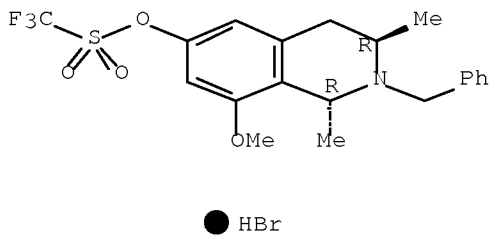


IT 183904-25-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and antimalarial activity of pindikamine A and its naphthylisoquinoline monomeric analog)

RN 183904-25-8 CAPLUS

CN Methanesulfonic acid, trifluoro-, 1,2,3,4-tetrahydro-8-methoxy-1,3-dimethyl-2-(phenylmethyl)-6-isoquinolinyl ester, hydrobromide, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:353205 CAPLUS Full-text
DOCUMENT NUMBER: 125:33492
TITLE: Synthesis of arylisoquinoline alkaloids
INVENTOR(S): Bringmann, Gerhard; Boyd, Michael R.; Gotz, Roland; Kelly, T. Ross
PATENT ASSIGNEE(S): United States Dept. of Health and Human Services, USA; Trustees of Boston College
SOURCE: PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9603381	A1	19960208	WO 1995-US9070	19950719
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5552550	A	19960903	US 1994-279291	19940722
US 5571919	A	19961105	US 1994-279339	19940722
US 5578729	A	19961126	US 1994-363684	19941223
CA 2195646	A1	19960208	CA 1995-2195646	19950719
AU 9531351	A	19960222	AU 1995-31351	19950719
AU 699121	B2	19981126		
EP 775115	A1	19970528	EP 1995-927269	19950719
EP 775115	B1	20030122		
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JP 10506377	T	19980623	JP 1995-505832	19950719
AT 231493	T	20030215	AT 1995-927269	19950719
EP 1325915	A1	20030709	EP 2003-5979	19950719
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
ES 2191056	T3	20030901	ES 1995-927269	19950719

PRIORITY APPLN. INFO.: US 1994-279291 A 19940722
US 1994-279339 A 19940722

US 1994-305211	A	19940913
US 1994-363684	A	19941223
EP 1995-928091	A3	19950719
WO 1995-US9070	W	19950719

OTHER SOURCE(S): CASREACT 125:33492; MARPAT 125:33492
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

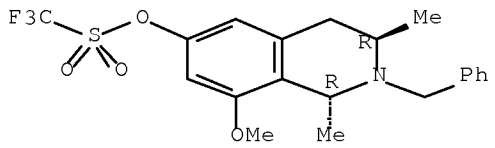
AB The present invention provides a method of preparing dimeric arylisoquinoline alkaloids by coupling two isoquinoline building blocks, each of which may be the same or different, together with a sym. or nonsym. biaryl building block to form homodimers or heterodimers, including the antiviral michellamines. The present invention also provides new, medically useful homodimeric and heterodimeric arylisoquinoline compds. and derivs. Thus, the isoquinolineboronic acid I was coupled with the binaphthalene II to give a quateraryl derivative which was hydrogenated to give michellamine A (III) and B.

IT 177555-90-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of arylisoquinoline alkaloids)

RN 177555-90-7 CAPLUS

CN Methanesulfonic acid, trifluoro-, 1,2,3,4-tetrahydro-8-methoxy-1,3-dimethyl-2-(phenylmethyl)-6-isoquinolinyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

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This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

L5 0 L3

FILE 'MEDLINE' ENTERED AT 12:14:44 ON 20 FEB 2008

FILE 'BIOSIS' ENTERED AT 12:14:44 ON 20 FEB 2008

FILE 'EMBASE' ENTERED AT 12:14:44 ON 20 FEB 2008

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L6 0 L3

FILE 'MARPAT' ENTERED AT 12:15:11 ON 20 FEB 2008
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FILE CONTENT: 1961-PRESENT VOL 148 ISS 6 (20080215/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US	2008004452	03 JAN 2008
DE	102006031314	03 JAN 2008
EP	1873224	02 JAN 2008
JP	2008001611	10 JAN 2008
WO	2008007169	17 JAN 2008
GB	2439172	19 DEC 2007
FR	2903012	04 JAN 2008
RU	2314304	10 JAN 2008
CA	2550557	14 DEC 2007

Expanded G-group definition display now available.

Effective December 15th the iteration and answer limits in MARPAT have increased from 100,000 to 200,000 for both on-line and batch searches. For more information on MARPAT search limits, type HELP SLIMITS at an arrow prompt.

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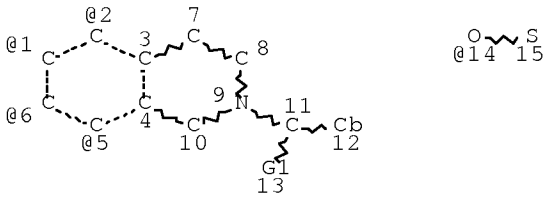

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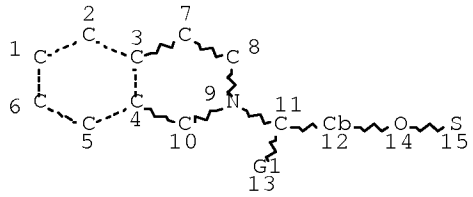

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NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

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L11   26 SEA FILE=MARPAT SSS FUL L7 (MODIFIED ATTRIBUTES)

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
ECLEVEL IS LIM ON ALL NODES
ALL RING(S) ARE ISOLATED

L12   14 SEA FILE=MARPAT SSS FUL L8 (MODIFIED ATTRIBUTES)
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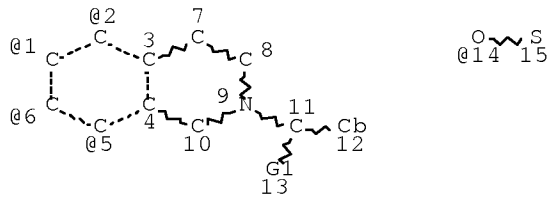

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DEFAULT ECLEVEL IS LIMITED

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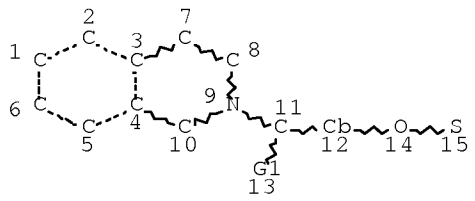


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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  15

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
ECLEVEL IS LIM ON ALL NODES
ALL RING(S) ARE ISOLATED

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L28          26 SEA FILE=MARPAT ABB=ON  PLU=ON  L25 OR L27

     FILE 'CAPLUS' ENTERED AT 12:27:44 ON 20 FEB 2008
L29          26 S L28
L30          24 S L29 NOT L4
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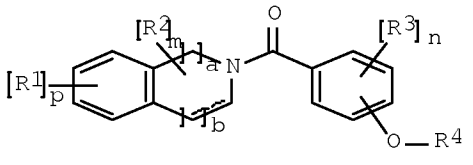
FILE 'MARPAT' ENTERED AT 12:28:52 ON 20 FEB 2008
L32 19 S L31

L32 ANSWER 1 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 140:375087 MARPAT Full-text
TITLE: Preparation of bicyclic benzamides as histamine H3 receptor ligands useful in the treatment of neurological diseases
INVENTOR(S): Best, Desmond John; Orlek, Barry Sidney
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004037788	A1	20040506	WO 2003-EP11650	20031020
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003278119	A1	20040513	AU 2003-278119	20031020
EP 1554243	A1	20050720	EP 2003-769430	20031020
EP 1554243	B1	20061122		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006505623	T	20060216	JP 2005-501524	20031020
AT 346044	T	20061215	AT 2003-769430	20031020
ES 2276125	T3	20070616	ES 2003-769430	20031020
US 2007105838	A1	20070510	US 2005-532373	20050421
PRIORITY APPLN. INFO.:			GB 2002-24557	20021022
			GB 2003-6328	20030319
			WO 2003-EP11650	20031020

GI



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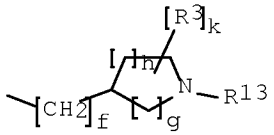

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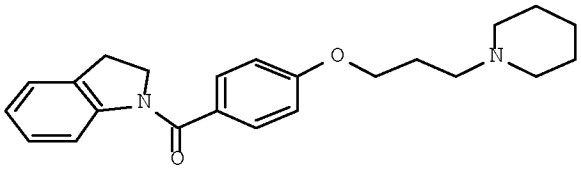

III

AB The title compds. [I; R1, R2 = halo, OH, CN, etc.; a, b = 0-2 (a and b cannot both = 0); R3 = halo, alkyl, alkoxy, CN, NH2, CF3; m, n = 0-2; p = 0-3 (when p = > 1 then two R1 may instead be linked to form a heterocyclyl); R4 = (CH2)qNR11R12, II (wherein q = 2-4; R11, R12 = alkyl; or NR11R12 = (un)substituted heterocyclyl; R13 = H, alkyl, cycloalkyl, alkylaryl, heterocyclyl; R14 = halo, alkyl, haloalkyl, OH, dialkylamino, alkoxy; f, k = 0-2; g = 0-2 and h = 0-3 (g and h cannot both be 0))], useful in the treatment of neurol. and psychiatric disorders, were prepared Thus, reacting 4-[3-(piperidin-1- yl)propoxy]benzoic acid hydrochloride (preparation given) with indoline afforded III which exhibited pKb ≥ 8.5 in the histamine H3 functional antagonist assay. The pharmaceutical composition comprising the compound I is claimed.

L32 ANSWER 2 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 139:308006 MARPAT Full-text
TITLE: Preparation of cyanamide amino acid derivatives useful as reversible inhibitors of cysteine proteases
INVENTOR(S): Liu, Weimin; Gilmore, Thomas A.; Hickey, Eugene Richard; Nemoto, Peter Allen; Spero, Denice M.
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 133 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003086325	A2	20031023	WO 2003-US9852	20030401
WO 2003086325	A3	20040701		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,

NE, SN, TD, TG

US 6878706	B1	20050412	US 2003-400385	20030327
CA 2477692	A1	20031023	CA 2003-2477692	20030401
AU 2003230772	A1	20031027	AU 2003-230772	20030401
EP 1495009	A2	20050112	EP 2003-723865	20030401
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005522489	T	20050728	JP 2003-583350	20030401
PRIORITY APPLN. INFO.:			US 2002-370368P	20020405
			WO 2003-US9852	20030401

AB The invention describes compds. Q-CR5R6NR4COCR2R3NR1CN [R1 = (un)substituted (un)saturated alkyl, cycloalkyl, aryl, arylsulfonyl, carbamoyl, etc.; R2, R3, R5, R6 = H or alkyl; R2R3C or CR5R6 may be nonarom. cycloalkyl; R4 = H, alkenyl, cycloalkyl, arylalkyl, aryl, alkyl, etc.; Q = Rg, CORg, SORg, or SO2Rg, where Rg = alkenyl, alkoxy, aryloxy, cycloalkyl, aryl, arylalkyl, (hetero)alkyl, etc.] or their pharmaceutically-acceptable salts, which reversibly inhibit the cysteine proteases such as cathepsins K, S, F, L and B, and pharmaceutical compns. containing such compds. for treating diseases such as rheumatoid arthritis, multiple sclerosis and other autoimmune diseases, osteoporosis, asthma, Alzheimer's disease, atherosclerosis and endometriosis. Thus, C4H8NO-COCH2N(Bu-i)COCH2N(CN)COCH2Ph (C4H8NO = morpholino) was prepared by sequential reactions of morpholine, BrCH2COBr, i-BuNH2, BrCH2COBr, and NCNHCOCH2Ph, which was prepared by acylation of cyanamide with phenylacetyl chloride.

L32 ANSWER 3 OF 19 MARPAT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	138:368779 MARPAT Full-text
TITLE:	Preparation of isoquinolines as 5-HT antagonists for treatment of psychiatric disorders
INVENTOR(S):	Angst, Christof; Haeberlein, Markus; Hill, Daniel; Jacobs, Robert; Moore, Gary; Pierson, Edward; Shenvi, Ashokkumar Bhikkappa
PATENT ASSIGNEE(S):	Astrazeneca AB, Swed.
SOURCE:	PCT Int. Appl., 139 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003037887	A1	20030508	WO 2002-SE1988	20021101
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2464342	A1	20030508	CA 2002-2464342	20021101
AU 2002343313	A1	20030512	AU 2002-343313	20021101
EP 1451172	A1	20040901	EP 2002-780244	20021101
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002013778	A	20041109	BR 2002-13778	20021101

CN 1608061	A	20050420	CN 2002-826281	20021101
JP 2005516896	T	20050609	JP 2003-540168	20021101
HU 2005001089	A2	20070928	HU 2005-1089	20021101
IN 2004DN01022	A	20070302	IN 2004-DN1022	20040419
MX 2004PA04076	A	20040723	MX 2004-PA4076	20040429
ZA 2004003240	A	20050407	ZA 2004-3240	20040429
US 2007010526	A1	20070111	US 2004-494424	20040430
NO 2004002154	A	20040729	NO 2004-2154	20040525
PRIORITY APPLN. INFO.:			SE 2001-3644	20011101
			WO 2002-SE1988	20021101

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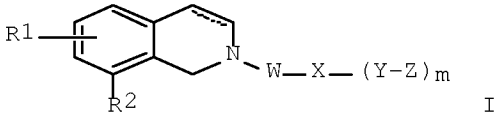

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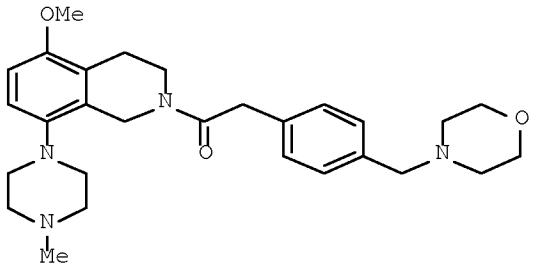

II

AB Title compds. I [wherein W = CO, CONRa, NRaCO, CO(CH2)nNRaCO, CSNRa, COCH2O, SO2NRa, NRaSO2, CH2NRa, COCH2, CH2CO, or 5-membered heterocyclyl; X = (un)substituted aryl or heterocyclyl; Y = bond, CH2, O, S, SO, CO, SO2, NRb, or NRbSO2; Z = Rb, CO2Ra, CON(Ra)2, NHRb, alkyl-N(Ra)2, SO2Rc, or (un)substituted aryl(alkyl) or heterocyclyl; R1 = halo, alkyl, ORa, SOpRa, N(Ra)2, or CN; R2 = aryl or heterocyclyl(carbonyl); Ra = H or (un)substituted alkyl; Rb = H, alkyl(sulfanyl), alkanoyl, aryl(alkyl), or arylalkoxyalkyl; Rc = alkyl, aryl, or heterocyclyl; m = 0 or 1; n = 0-4; p = 0-2;] were prepared as 5-HT1B and 5-HT1D antagonists (no data). For example, O-methylation of 5-hydroxyisoquinoline using NaOBu-t and PhMe3NCl in DMF (85%), followed by bromination with bromine in AcOH gave 5-methoxy-8-bromoisoquinoline (47%). Substitution with N-methylpiperazine using NaOBu-t, BINAP, and tris(dibenzylideneacetone)dipalladium in PhMe and subsequent reduction with NaCNBH3 and BF3•Et2O in MeOH gave 5-methoxy-8-(4- methylpiperazin-1-yl)-1,2,3,4-tetrahydroisoquinoline. Coupling of 4-(bromomethyl)phenylacetic acid with morpholine in the presence of K2CO3 in MeCN provided 4-(morpholinomethyl)phenylacetic acid. Amidation of the tetrahydroisoquinoline with the phenylacetic acid in DMF afforded II. I are useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 4 OF 19 MARPAT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 137:352768 MARPAT Full-text
TITLE: Preparation of aminoalkylphenols and related compounds for treatment of memory dysfunction.
INVENTOR(S): Kosley, Raymond W., Jr.; Palermo, Mark G.; Shimshock, Stephen J.; Wolf, Veronica
PATENT ASSIGNEE(S): Aventis Pharmaceuticals Inc., USA
SOURCE: U.S., 41 pp., Cont. of U.S. Ser. No. 148,601, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6479495	B1	20021112	US 1999-459046	19991210
PRIORITY APPLN. INFO.:			US 1997-108158P	19970929
			US 1998-148601	19980904

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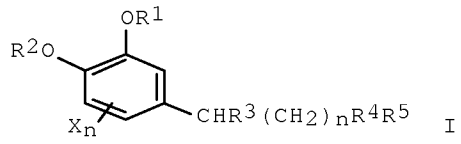

I

AB Title compds. [I; R1 = CH2C.tplbond.CR9; R2 = H, alkyl, carboxamide, sulfonyl, etc.; R3 = H, alkyl; R4-5 taken together with the N-atom to which they are attached form a piperazinyl ring; R9 = H, alkyl, etc.; m = 1-2; n = 0-1] and related compds. were prepared Thus, 4-hydroxy-3-(propargyloxy)pyrrolidinomethylbenzene reacted with MeNCO in THF in the presence of K2CO3 to give 4-(methylaminocarbonyloxy)-3-(propargyloxy)pyrrolidinomethylbenzene, which inhibited acetylcholinesterase with IC50 = 0.0036 μM.
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 5 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 137:33229 MARPAT Full-text
TITLE: Methods for synthesis of amino-tetrahydroisoquinoline ring compounds
INVENTOR(S): Liu, Song; Rennells, William Martin
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 15 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002077480	A1	20020620	US 2001-28227	20011221

US 6608193 B2 20030819
PRIORITY APPLN. INFO.: US 2001-28227 20011221
AB Methods of preparing amino-substituted-tetrahydroisoquinoline ring compds. include the steps of providing a support-bound amino-substituted-tetrahydroisoquinoline compound; forming an intermediate by reacting the support-bound amino-substituted- tetrahydroisoquinoline compound with a reagent; and cyclizatively cleaving the support-bound amino-substituted-tetrahydroisoquinoline compound to form the amino-substituted-tetrahydroisoquinoline ring compound

L32 ANSWER 6 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 136:151003 MARPAT Full-text
TITLE: Preparation of N-[(aryloxy)phenyl](thio)ureas and -carbamates as agrochemical fungicides
INVENTOR(S): Gerusz, Vincent; Mansfield, Darren James; Perez, Jose; Tickle, David; Vors, Jean-Pierre; Baldwin, Derek; Hough, Thomas; Mitchell, Dale Robert
PATENT ASSIGNEE(S): Aventis CropScience S. A., Fr.
SOURCE: Eur. Pat. Appl., 42 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1178039	A1	20020206	EP 2001-420173	20010801
EP 1178039	B1	20070411		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR				
FR 2812633	A1	20020208	FR 2000-10305	20000804
AT 359265	T	20070515	AT 2001-420173	20010801
ES 2284605	T3	20071116	ES 2001-420173	20010801
JP 2002114751	A	20020416	JP 2001-238513	20010806
US 2003008884	A1	20030109	US 2001-923124	20010806
US 6696487	B2	20040224		

PRIORITY APPLN. INFO.: FR 2000-10305 20000804
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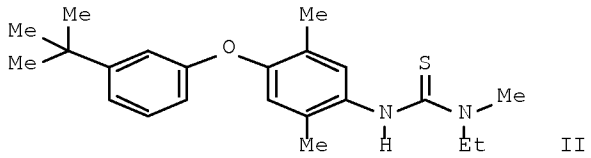

II

AB R6ZZ1NRC(:X)R5 [I; R = H, alkyl, etc.; R5 = NR1R2, OR3, SR3; R1,R2 = H, alkyl, acyl, etc.; RR1, RR3, R1R2 = atoms to complete a ring; R3 = H, alkyl, etc.; R6 = 2-benzothienyl, 5-tert-butyl-1,3,4-oxadiazol-2- yl, substituted Ph, etc.; X = O or S; Z = bond, O, CO, SO0-2, NH, etc.; Z1 = e.g., 2,5-dimethyl-1,4-phenylene] were prepared Thus, 2-chloro-1,4-xylene was nitrated and the product etherified by 3-(Me3C)C6H4OH to give, after reduction, the

phenoxyanilline which was treated with Cl2CS and the product amidated by HNMeEt to give title compound II. Data for biol. activity of I were given.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 7 OF 19 MARPAT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 135:303784 MARPAT Full-text

TITLE: Preparation of novel 1,2,3,4-tetrahydrosioquinolines for use as fungicides

INVENTOR(S): Babin, Didier; Benedetti, Yannick; Chatreaux, Fabienne; Weston, John Bernard

PATENT ASSIGNEE(S): Aventis Pharma S.A., Fr.

SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001074808	A1	20011011	WO 2001-FR1004	20010404
W: AE, AG, AL, AU, BA, BB, BG, BR, BZ, CA, CN, CO, CR, CU, CZ, DM, DZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2807434	A1	20011012	FR 2000-4324	20000405
FR 2807434	B1	20021018		
CA 2405126	A1	20011011	CA 2001-2405126	20010404
EP 1272485	A1	20030108	EP 2001-921468	20010404
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003529599	T	20031007	JP 2001-572498	20010404
MX 2002PA09764	A	20030327	MX 2002-PA9764	20021003
US 2003187267	A1	20031002	US 2002-240014	20021205
PRIORITY APPLN. INFO.:			FR 2000-4324	20000405
			WO 2001-FR1004	20010404

OTHER SOURCE(S): CASREACT 135:303784

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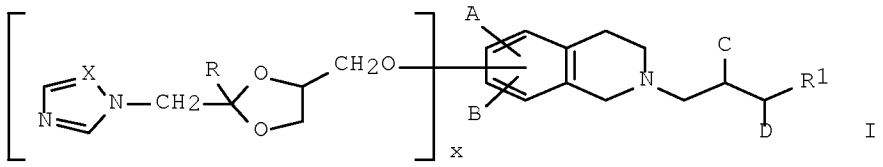

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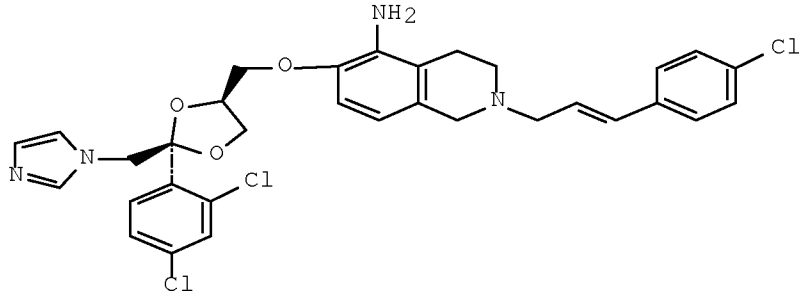

II

AB Title compds. I [X = N, CH; R = (un)substituted Ph; R1 = (un)substituted Ph, pyridyl, pyrimidinyl; A, B = H, (un)substituted OH, NH2; C, D = H, halogen, (un)substituted alkyl; CD = (un)substituted alkylene; x = 1, 2] were prepared for use as fungicides (no data). Thus, (E)-2-[3-(4-chlorophenyl)-2-propenyl]-1,2,3,4- tetrahydro-6-isoquinolinol was nitrated, etherified with cis-(±)-2-(2,4-dichlorophenyl)-2-(1H-imidazol-1-ylmethyl)-1,3- dioxolane-4-methanol, and reduced to the amine II.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 8 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 134:209697 MARPAT Full-text
TITLE: Preparation of cationic or zwitterionic aryliminium compounds for use as bleach booster providing resistance towards decomposition by aromatization and laundry methods employing same
INVENTOR(S): Dykstra, Robert Richard; Miracle, Gregory Scot
PATENT ASSIGNEE(S): Procter & Gamble Company, USA
SOURCE: PCT Int. Appl., 100 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001016273	A1	20010308	WO 2000-US23315	20000825
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2381888	A1	20010308	CA 2000-2381888	20000825

BR 2000014149	A	20020514	BR 2000-14149	20000825
EP 1206515	A1	20020522	EP 2000-957786	20000825
EP 1206515	B1	20060412		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
TR 200200459	T2	20020621	TR 2002-459	20000825
JP 2003508584	T	20030304	JP 2001-520821	20000825
AU 771521	B2	20040325	AU 2000-69354	20000825
AT 323147	T	20060415	AT 2000-957786	20000825
ES 2262534	T3	20061201	ES 2000-957786	20000825
MX 2002PA02127	A	20020918	MX 2002-PA2127	20020226
PRIORITY APPLN. INFO.:			US 1999-151175P	19990827
			WO 2000-US23315	20000825

AB Bleach boosting compds. selected from the group consisting of bleach boosters comprising quaternary imine cations, zwitterions, polyions having a net charge of from about +3 to about -3 and mixts. thereof, bleaching species comprising oxaziridinium cations, zwitterions, polyions having a net charge of from about +3 to about -3 and mixts. thereof, and mixts. thereof are disclosed. The bleach boosting compds. increase bleaching effectiveness even in lower temperature solns. and provide improved stability toward unwanted bleach boosting compound decomposition The bleach boosting compds. are ideally suited for inclusion into bleaching compns. including those with detersive surfactants and enzymes. Also provided is a method for laundering a fabric employing the bleach boosting compds., and a laundry additive product employing the bleach boosting compds.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 9 OF 19 MARPAT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 134:193347 MARPAT Full-text

TITLE: Preparation of indol-1-yl(or quinolin-1-ylmethyl benzoic acids as peroxisome proliferator activated receptor (PPAR) agonists

INVENTOR(S): Hargreaves, Rodney Brian; Whittamore, Paul Robert Owen

PATENT ASSIGNEE(S): AstraZeneca AB, Swed.; AstraZeneca UK Limited

SOURCE: PCT Int. Appl., 78 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001012187	A2	20010222	WO 2000-GB3140	20000814
WO 2001012187	A3	20010607		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2380775	A1	20010222	CA 2000-2380775	20000814
BR 2000013368	A	20020507	BR 2000-13368	20000814
EP 1210343	A2	20020605	EP 2000-953320	20000814

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL

JP 2003507327	T	20030225	JP 2001-516533	20000814
NZ 517059	A	20040528	NZ 2000-517059	20000814
ZA 2002000669	A	20030424	ZA 2002-669	20020124
MX 2002PA01598	A	20020702	MX 2002-PA1598	20020214
NO 2002000765	A	20020417	NO 2002-765	20020215

PRIORITY APPLN. INFO.: GB 1999-19411 19990818
WO 2000-GB3140 20000814

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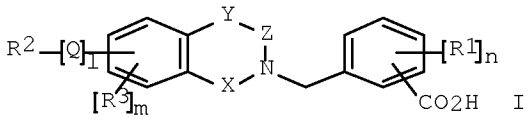

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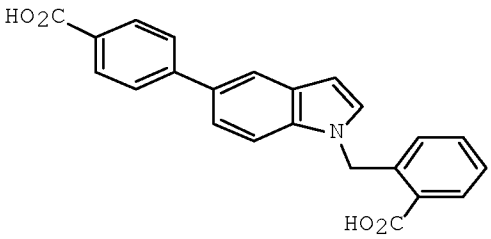


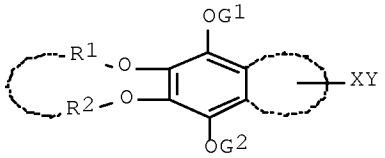
II

AB The title compds. [I; X, Y, Z = a bond, atom or groups of atoms such that X, Y and Z together with the nitrogen atom = 5-6 membered (non)aromatic ring; R1 = alkyl, halo, haloalkyl, etc.; n = 0-2; R2 = (un)substituted hydrocarbyl, halo, CN, etc.; l = 0-1; Q = a bond, alkylene, alkenylene; R3 = alkyl, halo, haloalkyl, etc.; m = 0-2] which act as peroxisome proliferator activated receptor (PPAR) agonists, in particular gamma receptors (PPARγ) (data given), and so are useful in the treatment of states of insulin resistance, including type 2 diabetes mellitus, were prepared E.g., a multi-step synthesis of II was given.

L32 ANSWER 10 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 134:173046 MARPAT Full-text
TITLE: Mitochondria function activating agents containing benzocycloalkane derivatives
INVENTOR(S): Kato, Kaneyoshi; Oura, Yasukazu; Miyamoto, Masaomi
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 32 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001048784	A	20010220	JP 1999-227936	19990811

PRIORITY APPLN. INFO.: JP 1999-227936 19990811
GI



I

AB The activating agents, useful for treatment of neurodegenerative diseases, e.g. parkinsonism, Alzheimer's disease, amyotrophic lateral sclerosis, Huntington's disease, etc., contain benzocycloalkane derivs. I [R1, R2 = C1-6 alkyl; R1 and R2 may be bonded together to form a ring; X = spacer with 1-5 atoms in the main chain; Y = acyl, (un)substituted hydroxy, (un)substituted amino, (un)substituted aryl; ring A = 5-8-membered ring which may have substituents such as XY; G1, G2 = H, phenolic OH-protecting group being cleaved in vivo] or their salts. 7-[2-(2-Quinolyloxy)ethyl]-2,3-dimethoxy-1,4-bis[[2- (dimethylamino)acetyl]oxy]-6,7,8,9-tetrahydro-5H-benzocycloheptene trihydrochloride (preparation given) expanded life span of mice with CO2-induced anoxia. Tablets of I were also formulated.

L32 ANSWER 11 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 134:162927 MARPAT Full-text
TITLE: Preparation of 1-aroylpiperidine-2-carboxamides as hair growth promoters
INVENTOR(S): Degenhardt, Charles Raymond; Eickhoff, David Joseph; McIver, John McMillan
PATENT ASSIGNEE(S): The Procter & Gamble Company, USA
SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001010839	A2	20010215	WO 2000-US20568	20000728
WO 2001010839	A3	20010503		

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-147280P 19990805
AB Preparation of title compds. as hair growth promoters (no data) was described. Thus, tetraamidation of pyromellitic acid by (S)-N-(1,7-diphenyl-4-heptyl)piperidinecarboxamide (preparation each given) was described.

L32 ANSWER 12 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 134:162926 MARPAT Full-text
TITLE: Preparation of 1-arysulfonylpiperidine-2-carboxamides as hair growth promoters
INVENTOR(S): Degenhardt, Charles Raymond; Eickhoff, David Joseph; McIver, John McMillan
PATENT ASSIGNEE(S): The Procter & Gamble Company, USA
SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001010838	A1	20010215	WO 2000-US20600	20000728

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-147276P 19990805
AB Preparation of title compds. as hair growth promoters (no data) was described. Thus, trisamidation of 3,5-dichlorosulfonylbenzoyl chloride by (S)-N-(1,7-diphenyl-4-heptyl)piperidinecarboxamide (preparation each given) was described.
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 13 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 133:106620 MARPAT Full-text
TITLE: Detergent compositions comprising a pectate lyase and a bleach booster
INVENTOR(S): Showell, Michael Stanford; Zhu, Yong; Moese, Rosa Laura; Bettiol, Jean-Luc Philippe; Busch, Alfred
PATENT ASSIGNEE(S): The Procter & Gamble Company, USA
SOURCE: PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000042151	A1	20000720	WO 1999-US803	19990114

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,

CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9924565	A	20000801	AU 1999-24565	19990114
CA 2357047	A1	20000720	CA 2000-2357047	20000113
WO 2000042156	A1	20000720	WO 2000-US838	20000113

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1141200	A1	20011010	EP 2000-904330	20000113

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

BR 2000007817	A	20011106	BR 2000-7817	20000113
JP 2003529623	T	20031007	JP 2000-593713	20000113
MX 2001PA07217	A	20020424	MX 2001-PA7217	20010716
PRIORITY APPLN. INFO.:			WO 1999-US790	19990114
			WO 1999-US800	19990114
			WO 1999-US801	19990114
			WO 1999-US802	19990114
			WO 1999-US803	19990114
			WO 2000-US838	20000113

AB Detergent compns. comprise pectate lyase, peroxygen source, and 0.1-10% color-safe bleach booster for superior cleaning of fabrics and hard surfaces. An example granular detergent contained pectate lyase 0.1, sodium tripolyphosphate 22.0, sodium carbonate 45.0, sodium silicate 6.2, 1-(3,4-dihydroisoquinolinium)decanesulfate 0.4, Plurafac LF 404 0.5%, and the balance water.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 14 OF 19 MARPAT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 130:281863 MARPAT Full-text

TITLE: Preparation of aminoalkylphenols and related compounds for treatment of memory dysfunction.

INVENTOR(S): Kosley, Raymond W., Jr.; Palermo, Mark G.; Shimshock, Stephen J.; Wolf, Veronica

PATENT ASSIGNEE(S): Hoechst Marion Roussel, Inc., USA

SOURCE: PCT Int. Appl., 169 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9916746	A1	19990408	WO 1998-US18587	19980904

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2302412	A1	19990408	CA 1998-2302412	19980904
CA 2302412	C	20051220		
AU 9893055	A	19990423	AU 1998-93055	19980904
AU 752008	B2	20020905		
BR 9812694	A	20000822	BR 1998-12694	19980904
EP 1032559	A1	20000906	EP 1998-945914	19980904
EP 1032559	B1	20061129		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
JP 2001518463	T	20011016	JP 2000-513832	19980904
JP 3687899	B2	20050824		
AT 346840	T	20061215	AT 1998-945914	19980904
ES 2276473	T3	20070616	ES 1998-945914	19980904
PRIORITY APPLN. INFO.:			US 1997-939466	19970929
			WO 1998-US18587	19980904

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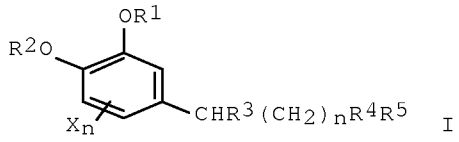

I

AB Title compds. [I; R1 = H, alkyl, CONR6R7, CH2CO2R8, CH2CN, CH2CH2OH, (substituted) PhCH2, trialkylsilyl; R2 = H, alkyl, CONR6R7, (substituted) PhCH2, trialkylsilyl; R3, R4, R6, R13 = H, alkyl; R5 = H, alkyl, (substituted) PhCH2(CH2)r, PhCHMe; NR4R5 = morpholino, pyrrolidinyl, piperidinyl, homopiperidinyl, substituted piperazinyl, etc.; R7 = alkyl, (substituted) PhCHR13, tetrahydroisoquinolinyl, morpholino; R8 = alkyl; m = 1, 2; r = 0-2], and related compds.,were prepared Thus, 4-hydroxy-3-(propargyloxy)pyrrolidinomethylbenzene reacted with MeNCO in THF in the presence of K2CO3 to give 4-(methylaminocarbonyloxy)-3-(propargyloxy)pyrrolidinomethylbenzene, which inhibited acetylcholinesterase with IC50 = 0.0036 μM.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 15 OF 19 MARPAT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 130:51363 MARPAT Full-text

TITLE: Pollen protease inhibitor for prevention and control of allergy

INVENTOR(S): Inada, Yuji; Futami, Mitsuko; Nakai, Jiro

PATENT ASSIGNEE(S): Toin Yokohama Daigaku, Japan; Ono Pharmaceutical Co.

SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 10306025	A	19981117	JP 1997-132935	19970507

PRIORITY APPLN. INFO.: JP 1997-132935 19970507

AB Allergies associated with pollen protease (I) are prevented and controlled with amidino derivs. and guanidino derivs. that inhibit I. Twenty-eight amidino and guanidino derivs. inhibit I of ragweed were given. These I inhibitors have low toxicity.

L32 ANSWER 16 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 126:48623 MARPAT Full-text
TITLE: Color-safe imine bleach boosters, compositions and laundry methods employing same
INVENTOR(S): Miracle, Gregory S.; Burns, Michael E.; Kellett, Patti J.; Burckett-St Laurent, James C. T. R.
PATENT ASSIGNEE(S): Procter & Gamble Company, USA
SOURCE: U.S., 22 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5576282	A	19961119	US 1995-526623	19950911
US 5710116	A	19980120	US 1996-697748	19960829
CA 2231540	A1	19970320	CA 1996-2231540	19960830
CA 2231540	C	20030114		
WO 9710323	A1	19970320	WO 1996-US13983	19960830
W: BR, CA, CN, JP, MX				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 850296	A1	19980701	EP 1996-932158	19960830
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
CN 1201486	A	19981209	CN 1996-197991	19960830
CN 1105174	B	20030409		
BR 9610602	A	19990713	BR 1996-10602	19960830
JP 11513413	T	19991116	JP 1996-511990	19960830
IN 1996DE01960	A	20051104	IN 1996-DE1960	19960903

PRIORITY APPLN. INFO.: US 1995-526623 19950911
WO 1996-US13983 19960830

AB Bleach boosters comprise zwitterionic imines and anionic imine polyions having a net neg. charge. The bleach boosters increase bleaching effectiveness in lower temperature solns. and demonstrate superior color safety profiles. The bleach boosters are ideally suited for inclusion into bleaching compns. including those with detersive surfactants and enzymes. Laundry additive products include zwitterionic imines and anionic imine polyions with a net neg. charge as bleach boosters. 3-(3,4-Dihydroisoquinolinium)propane sulfonate was used as a bleach booster.

L32 ANSWER 17 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 125:328305 MARPAT Full-text
TITLE: Preparation of (2-amino-3-mercaptopropylamino)benzene derivatives as inhibitors of farnesyl-protein transferase
INVENTOR(S): Ciccarone, Terrence M.; Williams, Theresa M.; Dinsmore, Christopher J.; Stokker, Gerald E.; Wai,

John S.
PATENT ASSIGNEE(S): Merck and Co., Inc., USA
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9630014	A1	19961003	WO 1996-US3958	19960325
W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IS, JP, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, US, UZ, VN, AM, AZ, BY, KG, KZ				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5631280	A	19970520	US 1995-448865	19950524
AU 9653218	A	19961016	AU 1996-53218	19960325
EP 817629	A1	19980114	EP 1996-909845	19960325
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
JP 11503418	T	19990326	JP 1996-529541	19960325

PRIORITY APPLN. INFO.: US 1995-412621 19950329
US 1995-448865 19950524
WO 1996-US3958 19960325

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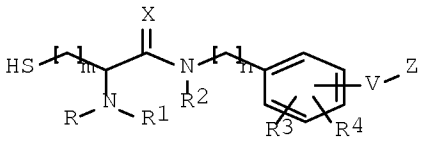

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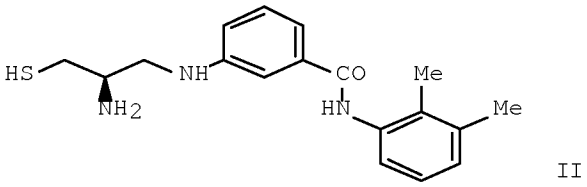


II

AB The title compds. [I; X = O, H2; R, R1, R2 = H, C1-6 alkyl, C1-6 aralkyl; R3, R4 = H, (substituted) C1-6 alkyl, (substituted) cycloalkyl, etc.; V = C.tplbond.C, C(O), O, etc.; Z = (substituted) C1-8 alkyl, C2-8 alkenyl, aryl, heterocyclyl; m = 1-2; n = 0-1], useful for inhibiting farnesyl-protein transferase and the farnesylation of the oncogene protein Ras, and for treating cancer, were prepared Thus, reaction of 3-nitrobenzoic acid with 2,3-dimethylaniline in the presence of 1-hydroxybenzotriazole, EDC and Et3N in DMF followed by hydrogenation of the resulting 3-nitro-N-(2,3-dimethylphenyl)benzamide over Pd/C in MeOH/THF, reaction of 3-amino-N-(2,3-dimethylphenyl)benzamide with N-Boc-S-(triphenylmethyl)cysteinal in the presence of NaBH(OAc)3 in 1,2-Cl2C2H4 and deprotection of the resulting

intermediate afforded the expected product (R)-II.2HCl. In general, compds. I showed IC50 of < 50 μM against human FPTase.

L32 ANSWER 18 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 125:33933 MARPAT Full-text
TITLE: Synthesis of monomeric and dimeric naphthylisoquinoline alkaloids
INVENTOR(S): Bringmann, Gerhard; Harmsen, Sven; Gotz, Roland; Boyd, Michael R.
PATENT ASSIGNEE(S): United States Dept. of Health and Human Services, USA
SOURCE: PCT Int. Appl., 115 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9603382	A1	19960208	WO 1995-US9132	19950719
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5552550	A	19960903	US 1994-279291	19940722
US 5571919	A	19961105	US 1994-279339	19940722
CA 2195647	A1	19960208	CA 1995-2195647	19950719
AU 9531969	A	19960222	AU 1995-31969	19950719
AU 709428	B2	19990826		
EP 772595	A1	19970514	EP 1995-928091	19950719
EP 772595	B1	20030402		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10506616	T	19980630	JP 1995-505844	19950719
AT 236127	T	20030415	AT 1995-928091	19950719
EP 1325915	A1	20030709	EP 2003-5979	19950719
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
PT 772595	T	20030829	PT 1995-928091	19950719
ES 2197205	T3	20040101	ES 1995-928091	19950719

PRIORITY APPLN. INFO.:
US 1994-279291 19940722
US 1994-279339 19940722
EP 1995-928091 19950719
WO 1995-US9132 19950719

OTHER SOURCE(S): CASREACT 125:33933
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

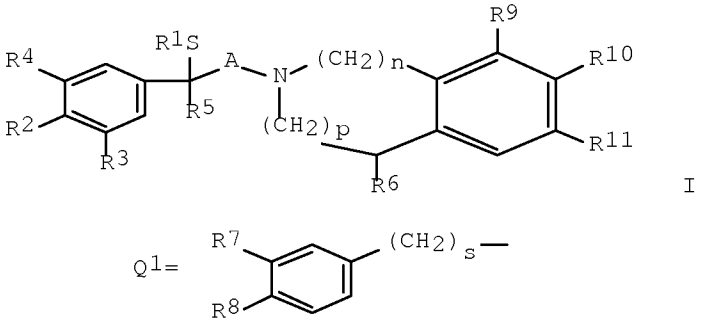
AB The invention provides methods of preparing monomeric naphthylisoquinoline alkaloids, including the antiparasitic korupensamines and related compds., as well as non-korupensamines and other monomeric naphthylisoquinoline alkaloids.

The invention also provides methods of preparing dimeric naphthylisoquinoline alkaloids by coupling together two monomeric naphthylisoquinoline alkaloids, each of which may be the same or different, and one, both, or neither of which may possess a C-8' to C-5 naphthalene/isoquinoline linkage, to form homodimers or heterodimers, including the antiviral mechellamines. The invention further provides new, medically useful monomeric naphthylisoquinoline compds. and homodimeric and heterodimeric naphthylisoquinoline compds. and derivs. thereof. Thus, korupensamine A (I), prepared via coupling of II and III was formylated and acetylated followed by self coupling to give michellamine A (IV).

L32 ANSWER 19 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 123:169526 MARPAT Full-text
TITLE: Preparation of (arylthio)tetrahydroisoquinolinealk anenitriles and related compounds as multiple drug resistance reversal agents.
INVENTOR(S): Powell, Dennis; Paul, Rolf; Hallett, William A.; Berger, Dan M.; Dutia, Minu D.
PATENT ASSIGNEE(S): American Cyanamid Co., USA
SOURCE: Eur. Pat. Appl., 87 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 634401	A1	19950118	EP 1994-110067	19940629
EP 634401	B1	19970813		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
US 5387685	A	19950207	US 1993-92653	19930716
AT 156816	T	19970815	AT 1994-110067	19940629
ES 2109554	T3	19980116	ES 1994-110067	19940629
JP 07179422	A	19950718	JP 1994-183008	19940713
CA 2128139	A1	19950117	CA 1994-2128139	19940714
FI 9403392	A	19950117	FI 1994-3392	19940715
NO 9402673	A	19950117	NO 1994-2673	19940715
AU 9467501	A	19950127	AU 1994-67501	19940715
AU 691495	B2	19980521		
ZA 9405211	A	19950228	ZA 1994-5211	19940715
HU 71412	A2	19951128	HU 1994-2111	19940715
HU 218478	B	20000928		
CN 1114650	A	19960110	CN 1994-108463	19940716
CN 1049891	B	20000301		
US 5550149	A	19960827	US 1994-328643	19941025
US 5561141	A	19961001	US 1995-449972	19950525
US 5639887	A	19970617	US 1995-450172	19950525
PRIORITY APPLN. INFO.:			US 1993-92653	19930716
			US 1994-328643	19941025

OTHER SOURCE(S): CASREACT 123:169526
GI



I

AB Title compds. [I; R1 = alkyl, cycloalkyl, bicycloalkyl, tricycloalkyl, heterocyclyl, XC6H4(CH2)m; m = 0-3; X = H, alkyl, iodo, Cl, Br, F, NO2, amino; R2 = H, OH, alkoxy, F, Br, Cl, iodo, NO2, OCF3, alkyl, amino; R3 = R2, silyloxy, OCH2CH2Cl, heterocyclylalkoxy, OSO2CF3, etc.; R2R3 = methylenedioxy, ethylenedioxy; R4 = H, OH, alkoxy, F, Br, Cl, iodo, alkyl; R5 = H, cyano, CH2OH, alkoxycarbonyl, CH2NH2, aminomethyl, alkyl; A = alkylene, phenylene; n, p = 0-2; R6 = H, alkyl, Q1; s = 1-3; R7, R8 = H, alkyl, alkoxy; R9 = H, alkoxy, F, Br, Cl, iodo, alkyl; R10 = H, alkoxy, OH, F, Br, Cl, iodo, alkyl, OCH2CH2Cl, heterocyclylalkoxy, OCF3, PhCH2O, NO2, amino, etc.; R11 = H, alkoxy, alkylthio, OH, F, Br, Cl, iodo, OCF3, PhCH2O, alkyl, heterocyclylalkoxy], were prepared for potentiating the activity of chemotherapeutic anti-cancer agents by increasing the sensitivity of multi-drug resistant cells to such chemotherapeutic agents. Thus, α-chloro-3,4-dimethoxybenzeneacetonitrile, p-thiocresol, and K2CO3 were stirred in MeCN at 65° overnight to give 3,4-dimethoxy-α-[(4-methylphenyl)thio]benzeneacetonitrile. This in Me2SO was treated with NaH and then Br(CH2)3Cl to give α-(3-chloropropyl)-3,4-dimethoxy-α-[(4-methylphenyl)thio]benzeneacetonitrile. The latter was stirred with K2CDO3, KI, and 6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline hydrochloride in DMF to give α-(3,4-dimethoxyphenyl)-3,4-dihydro- 6,7-dimethoxy-α-[(4-methylphenyl)thio]-2(1H)- isoquinolinepentanenitrile (II). II.HCl at 10 μM in OVCAR-3 cells resistant to bisantrene showed a difference score of 85, vs. 39 for verapamil.

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FILE 'PASCAL' ENTERED AT 12:30:09 ON 20 FEB 2008

FILE 'DISSABS' ENTERED AT 12:30:09 ON 20 FEB 2008

L33 918 SEA ABB=ON PLU=ON ("DESAI U"? OR "UMESH D"?)/AU
L34 238 SEA ABB=ON PLU=ON "GUNNARSSON G"?/AU
L35 46 SEA ABB=ON PLU=ON L33 AND L34
L36 22 SEA ABB=ON PLU=ON ((L33 OR L34 OR L35)) AND (?COAGULANT? OR ?COAGULAT? OR ?CLOTTING OR ANTICLOTTING OR ANTICLOT###)(10A)(?SULPHAT? OR ?SULFAT?)
L37 8 DUP REM L36 (14 DUPLICATES REMOVED)

L37 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2007:1216093 CAPLUS Full-text
DOCUMENT NUMBER: 148:72357
TITLE: A Novel Allosteric Pathway of Thrombin Inhibition. Exosite II Mediated Potent Inhibition of Thrombin by Chemo-enzymatic, Sulfated Dehydropolymers of 4-Hydroxycinnamic Acids
AUTHOR(S): Henry, Brian L.; Monien, Bernhard H.; Bock, Paul E.; Desai, Umesh R.
CORPORATE SOURCE: Department of Medicinal Chemistry and Institute for Structural Biology and Drug Discovery, Virginia Commonwealth University, Richmond, VA, 23298, USA
SOURCE: Journal of Biological Chemistry (2007), 282(44), 31891-31899
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Thrombin and factor Xa, two important pro-coagulant proteinases, can be regulated through direct and indirect inhibition mechanisms. Recently, we designed sulfated dehydropolymers (DHPs) of 4-hydroxycinnamic acids that displayed interesting anticoagulant properties. To better understand their mechanism of action, we studied the direct inhibition of thrombin, factor Xa, factor IXa, and factor VIIa by CDSO3, FDSO3, and SDSO3, three analogs of sulfated DHPs. All three sulfated DHPs displayed a 2-3-fold preference for direct inhibition of thrombin over factor Xa, whereas this preference for inhibiting thrombin over factor IXa and factor VIIa increased to 17-300-fold, suggesting a high level of selectivity. Competitive binding studies with a thrombin-specific chromogenic substrate, a fluorescein-labeled hirudin peptide, bovine heparin, enoxaparin, and a heparin octasaccharide suggest that CDSO3 preferentially binds in or near anion-binding exosite II of thrombin. Studies of the hydrolysis of H-D-hexahydrotyrosol-Ala-Arg-p- nitroanilide indicate that CDSO3 inhibits thrombin through allosteric disruption of the catalytic apparatus, specifically through the catalytic step. Overall, designed sulfated DHPs appear to be the first mols. that bind primarily in the region defined by exosite II and allosterically induce thrombin inhibition. The mols. are radically different in structure from all the current clin. used anticoagulants and thus represent a novel class of potent dual thrombin and factor Xa inhibitors.

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2006:1108685 CAPLUS Full-text
DOCUMENT NUMBER: 146:55132
TITLE: Novel chemo-enzymatic oligomers of cinnamic acids as direct and indirect inhibitors of coagulation proteinases
AUTHOR(S): Monien, Bernhard H.; Henry, Brian L.; Raghuraman, Arjun; Hindle, Michael; Desai, Umesh R.
CORPORATE SOURCE: Department of Medicinal Chemistry, Virginia Commonwealth University, Richmond, VA, USA
SOURCE: Bioorganic & Medicinal Chemistry (2006), 14(23), 7988-7998
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 146:55132
AB Thrombin and factor Xa, two important procoagulant enzymes, have been prime targets for regulation of clotting through the direct and indirect mechanism of inhibition. Our efforts on exploiting the indirect mechanism led us to study a carboxylic acid-based scaffold, which displayed major acceleration in the inhibition of these enzymes [J. Med. Chemical 2005, 48, 1269, 5360]. This work advances the study to chemo-enzymically prepared oligomers of 4-hydroxycinnamic acids, DHPs, which display interesting anticoagulant properties. Oligomers, ranging in size from tetramers to pentadecamers, were prepared through peroxidase-catalyzed oxidative coupling of caffeic, ferulic, and sinapic acids, and sulfated using triethylamine-sulfur trioxide complex. Chromatog., spectroscopic, and elemental studies suggest that the DHPs are heterogeneous, polydisperse prepns. composed of intermonomer linkages similar to those found in natural lignins. Measurement of activated thromboplastin and prothrombin time indicates that both the sulfated and unsulfated derivs. of the DHPs display anticoagulant activity, which is dramatically higher than that of the reference polyacrylic acids. More interestingly, this activity approaches that of low-mol.-weight heparin with the sulfated derivative showing .apprx.2- to 3-fold greater potency than the unsulfated parent. Studies on the inhibition of factor Xa and thrombin indicate that the oligomers exert their anticoagulant effect through both direct and indirect inhibition mechanisms. This dual inhibition property of 4-hydroxycinnamic acid-based DHP oligomers is the first example in inhibitors of coagulation. This work puts forward a novel, nonheparin structure, which may be exploited for the design of potent, dual action inhibitors of coagulation through combinatorial virtual screening on a library of DHP oligomers.
REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 3 OF 8 PASCAL COPYRIGHT 2008 INIST-CNRS. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 2005-0229177 PASCAL Full-text
COPYRIGHT NOTICE: Copyright .COPYRGT. 2005 INIST-CNRS. All rights reserved.
TITLE (IN ENGLISH): Synthesis of per-sulfated flavonoids using 2,2,2-trichloro ethyl protecting group and their factor Xa inhibition potential
AUTHOR: GUNNARSSON Gunnar T.; RIAZ Muhammad; ADAMS Joanna; DESAI Umesh R.
CORPORATE SOURCE: Department of Medicinal Chemistry, Institute for

Structural Biology and Drug Discovery, Virginia Commonwealth University, 800 East Leigh Street, Suite 212, Richmond, VA 23219, United States
SOURCE: Bioorganic & medicinal chemistry, (2005), 13(5), 1783-1789, 39 refs.
ISSN: 0968-0896
DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: United Kingdom
LANGUAGE: English
AVAILABILITY: INIST-26564, 354000126183520370
AN 2005-0229177 PASCAL Full-text

AB The synthesis of per-sulfated flavonoids, organic compounds with multiple sulfate groups, is challenging. We present here a two-step synthesis of fully sulfated flavonoids in high overall yields using the 2,2,2-trichloroethyl moiety as a protecting group. The two-step synthesis results in exclusive formation of the per-sulfated product in contrast to common sulfating agents that yield differentially sulfated mixture of compounds. Most per-sulfated flavonoids studied are activators of antithrombin for accelerated inhibition of factor Xa, a key enzyme of the blood coagulation cascade. As a group the per-sulfated flavonoids possess a range of factor Xa inhibition potential.

L37 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 2005:71606 CAPLUS Full-text
DOCUMENT NUMBER: 142:212020
TITLE: Antithrombin Activation by Nonsulfated, Non-Polysaccharide Organic Polymer
AUTHOR(S): Monien, Bernhard H.; Desai, Umesh R.
CORPORATE SOURCE: Department of Medicinal Chemistry and Institute for Structural Biology and Drug Discovery, Virginia Commonwealth University, Richmond, VA, 23298-0540, USA
SOURCE: Journal of Medicinal Chemistry (2005), 48(4), 1269-1273
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Accelerated antithrombin inhibition of procoagulant enzymes has been exclusively achieved with polysulfated polysaccharides. The authors reasoned that antithrombin activation should be possible with nonsulfated activators based only on carboxylic acid groups. As a proof of the principle, linear poly(acrylic acid)s were found to bind to antithrombin and accelerate inhibition of factor Xa and thrombin. Our work demonstrates that mols. completely devoid of sulfate groups can activate antithrombin effectively and, more importantly, suggests that it may be possible to develop orally bioavailable, carboxylate-based antithrombin activators.
REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 4
ACCESSION NUMBER: 2004:1037066 CAPLUS Full-text
DOCUMENT NUMBER: 142:718
TITLE: Sulfated bis-cyclic agents
INVENTOR(S): Desai, Umesh R.; Gunnarsson, Gunnar
PATENT ASSIGNEE(S): Virginia Commonwealth University, USA

SOURCE: PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004103961	A2	20041202	WO 2004-US15731	20040519
WO 2004103961	A3	20050414		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2007173529	A1	20070726	US 2006-556906	20060926
PRIORITY APPLN. INFO.:			US 2003-471346P	P 20030519
			WO 2004-US15731	W 20040519

OTHER SOURCE(S): MARPAT 142:718

AB Sulfated bis-cyclic compds. that are potent anticoagulants and methods for their manufacture are provided. The sulfated compds. are bis-cyclic moieties comprised of an isoquinoline ring joined to a Ph ring. Counterions such as sodium may also be coordinated to the sulfate and carboxylate moieties.

L37 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:983013 CAPLUS Full-text
TITLE: Modeling Highly Charged Sulfated Molecules
AUTHOR(S): Krishnasamy, Chandravel; Desai, Umesh R.
CORPORATE SOURCE: Medicinal Chemistry, Virginia Commonwealth University, Richmond, VA, 23298-0540, USA
SOURCE: Abstracts, 56th Southeast Regional Meeting of the American Chemical Society, Research Triangle Park, NC, United States, November 10-13 (2004), GEN-378. American Chemical Society: Washington, D. C.
CODEN: 69FWAQ
DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English

AB Numerous highly charged sulfated mols., including sulfated glycosaminoglycans, are known to exist in nature and found to possess interesting physiol. roles. Many more highly charged sulfated mols. have been synthesized. Yet, modeling mols. with multiple sulfate groups is still in a state of infancy. Further, modeling mols. with multiple, close sulfate groups is more difficult because of the effect of high charge on the overall conformation of the mol. Heparin, low mol. weight heparin and heparin pentasaccharide DEFGH, clin. available regulators of clotting, are highly sulfated. We present here our work on heparin pentasaccharides to better simulate the overall conformation of these species. Energy minimization studies suggest that a high dielec. constant of 80 is required to simulate the structure of heparin pentasaccharides in vacuum. This conformation nearly matches the conformation of the

pentasaccharide in solution In contrast, a dielec. constant of 5 is required to simulate the antithrombin-bound conformation of the pentasaccharide. When applied to a series of pentasaccharide derivs., protocol predicts the order of antithrombin binding activity and suggests that conformational deviation from the optimum is the basis for loss of binding affinity in the series. The simulation protocol may be useful for rational design of new heparin mimics.

L37 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 5
ACCESSION NUMBER: 2002:215124 CAPLUS Full-text
DOCUMENT NUMBER: 136:365638
TITLE: Importance of Lysine 125 for Heparin Binding and Activation of Antithrombin
AUTHOR(S): Schedin-Weiss, Sophia; Desai, Umesh R.; Bock, Susan C.; Gettins, Peter G. W.; Olson, Steven T.; Bjoerk, Ingemar
CORPORATE SOURCE: Department of Veterinary Medical Chemistry, Swedish University of Agricultural Sciences, Uppsala Biomedical Center, Uppsala, SE-751 23, Swed.
SOURCE: Biochemistry (2002), 41(15), 4779-4788
CODEN: BICHAW; ISSN: 0006-2960
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The anticoagulant sulfated polysaccharide, heparin, binds to the plasma coagulation proteinase inhibitor, antithrombin, and activates it by a conformational change that results in a greatly increased rate of inhibition of target proteinases. Lys125 of antithrombin has previously been implicated in this binding by chemical modification and site-directed mutagenesis and by the crystal structure of a complex between antithrombin and a pentasaccharide constituting the antithrombin-binding region of heparin. Replacement of Lys125 with Met or Gln in this work reduced the affinity of antithrombin for full-length heparin or the pentasaccharide by 150-600-fold at I = 0.15, corresponding to a loss of 25-33% of the total binding energy. The affinity decrease was due both to disruption of approx. three ionic interactions, indicating that Lys125 and two other basic residues of antithrombin act cooperatively in binding to heparin, and to weakened nonionic interactions. The mutations caused a 10-17-fold decrease in the affinity of the initial, weak binding step of the two-step mechanism of heparin binding to antithrombin. They also increased the reverse rate constant of the second, conformational change step by 10-50-fold. Lys125 is thus a major heparin-binding residue of antithrombin, contributing an amount of binding energy comparable to that of Arg129, but less energy than Lys114. It is the first residue identified so far that has a critical role in the initial recognition of heparin by antithrombin, but also appreciably stabilizes the heparin-induced activated state of the inhibitor. These effects are exerted by interactions of Lys125 with the nonreducing end of the heparin pentasaccharide.
REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:499057 CAPLUS Full-text
DOCUMENT NUMBER: 121:99057
TITLE: Low molecular weight dermatan sulfate as an antithrombotic agent. Structure-activity relationship studies
AUTHOR(S): Linhardt, Robert J.; Desai, Umesh R.;

Liu, Jian; Pervin, Azra; Hoppensteadt, Debra; Fareed, Jawed
CORPORATE SOURCE: Coll. Pharm., Univ. Iowa, Iowa City, IA, 52242, USA
SOURCE: Biochemical Pharmacology (1994), 47(7), 1241-52
CODEN: BCPCA6; ISSN: 0006-2952
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A structure-activity relationship of low mol. weight dermatan sulfate was undertaken to understand better this new non-heparin, glycosaminoglycan-based antithrombotic agent. A dermatan sulfate prepared bovine intestinal mucosa [average mol. weight (MWavg) 25,000], and currently in clin. trials as an antithrombotic agent, was used in this study. Dermatan sulfate was partially depolymd. using hydrogen peroxide and copper(II) as catalyst to MWavg 5600 to obtain a low mol. weight dermatan sulfate. This low mol. weight dermatan sulfate was then fractionated by gel permeation chromatog. to obtain four subfractions having MWavg 7800, 5500, 4200 and 1950. The dermatan sulfate, low mol. weight dermatan sulfate and its subfractions showed substantially different optical rotations. The 1H-NMR spectroscopic anal. of dermatan sulfate samples showed some differences including increased content of GalpNAc4S6S residues and improved resolution in ring resonances for low mol. weight dermatan sulfate fractions, primarily the result of reduced mol. weight and lowered heterogeneity. Saccharide compositional anal. relied on chondroitin ABC lyase treatment followed by capillary electrophoresis. Polyacrylamide gel-based oligosaccharide mapping was also performed by treating dermatan sulfate samples with chondroitin B, AC and ABC lyases. These analyses showed increased amts. of sulfation as the MWavg decreased. In vitro bioassay showed maximum anti-Xa activity in the 4.2 kDa fraction and maximum heparin cofactor II-mediated anti-IIa activity in the 5.5 kDa fraction. The in vivo antithrombotic activity of these fractions was measured using a modified Wessler stasis thrombosis model. The 4.2 kDa fraction showed greater antithrombotic activity than the other low mol. weight dermatan sulfate fractions, dermatan sulfate, and low mol. weight dermatan sulfate. This enhanced activity may result from several structural features of the 4.2 kDa fraction including: a high content of 4,6- and 2,4-disulfated disaccharide sequences; the requirement of specific chain length; a change in the ratio of iduronic to glucuronic acid; and the presence of chondroitin ABC lyase resistant material.

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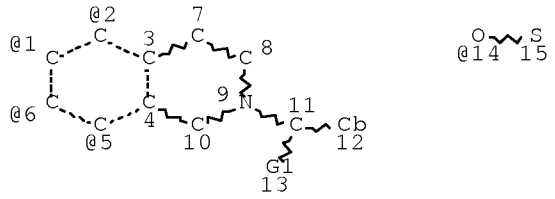

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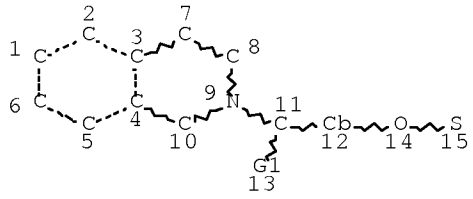

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GGCAT IS UNS AT 12
DEFAULT ECLEVEL IS LIMITED

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NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE
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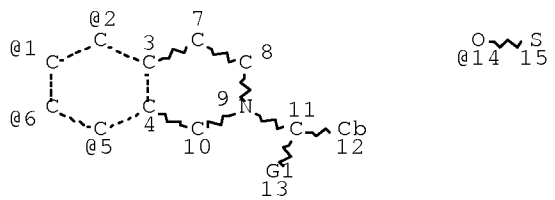

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VPA 14-1/2/5/6 U
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GGCAT   IS UNS AT 12
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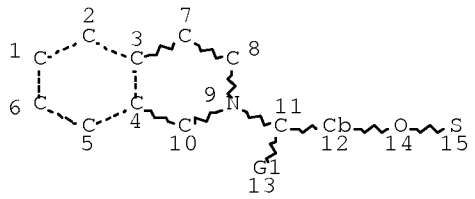
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE
L8   STR



VAR G1=H/O
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
MLEVEL IS CLASS AT 12
GGCAT   IS UNS AT 12
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 15

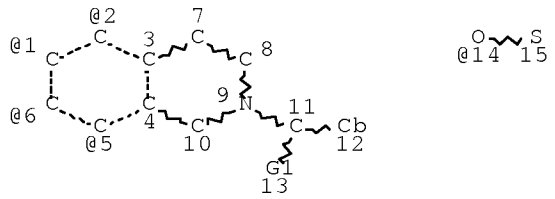
STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
ECLEVEL IS LIM ON ALL NODES
ALL RING(S) ARE ISOLATED

L11   26 SEA FILE=MARPAT SSS FUL L7 (MODIFIED ATTRIBUTES)

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
ECLEVEL IS LIM ON ALL NODES
ALL RING(S) ARE ISOLATED

L12   14 SEA FILE=MARPAT SSS FUL L8 (MODIFIED ATTRIBUTES)
L24   STR



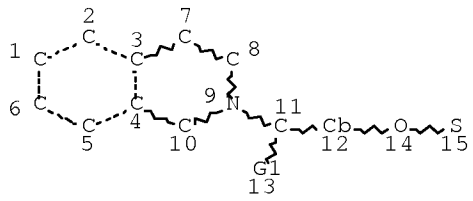
```
VAR G1=H/O
VPA 14-1/2/5/6 U
NODE ATTRIBUTES:
CONNECT IS X2  RC AT   7
CONNECT IS X2  RC AT  10
DEFAULT MLEVEL IS ATOM
MLEVEL  IS CLASS  AT  12
GGCAT   IS MCY  UNS  AT  12
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  15

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
ECLEVEL IS LIM ON ALL NODES
ALL RING(S) ARE ISOLATED

L25          14 SEA FILE=MARPAT SUB=L11 SSS FUL L24 (MODIFIED ATTRIBUTES)
L26             STR
```




```
VAR G1=H/O
NODE ATTRIBUTES:
CONNECT IS X2  RC AT   7
CONNECT IS X2  RC AT  10
DEFAULT MLEVEL IS ATOM
MLEVEL  IS CLASS  AT  12
GGCAT   IS MCY  UNS  AT  12
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  15

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
ECLEVEL IS LIM ON ALL NODES
ALL RING(S) ARE ISOLATED

L27          13 SEA FILE=MARPAT SUB=L12 SSS FUL L26 (MODIFIED ATTRIBUTES)
L28          26 SEA FILE=MARPAT ABB=ON  PLU=ON  L25 OR L27

     FILE 'REGISTRY' ENTERED AT 12:13:46 ON 20 FEB 2008
                ACT DAVISZ556/A
               ---------
```

```
L1              STR
L2              STR
L3           28 SEA SSS FUL L1 OR L2
               ---------
                D QUE STAT

     FILE 'CAPLUS' ENTERED AT 12:14:16 ON 20 FEB 2008
L4            9 SEA ABB=ON  PLU=ON  L3
                D 1-9 IBIB ABS HITSTR

     FILE 'CAOLD' ENTERED AT 12:14:28 ON 20 FEB 2008
L5            0 SEA ABB=ON  PLU=ON  L3

     FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 12:14:44 ON 20 FEB 2008
L6            0 SEA ABB=ON  PLU=ON  L3

     FILE 'MARPAT' ENTERED AT 12:15:11 ON 20 FEB 2008
L7              STR L1
L8              STR L2
L9            0 SEA SSS SAM L7 (MODIFIED ATTRIBUTES)
L10           1 SEA SSS SAM L8 (MODIFIED ATTRIBUTES)
L11          26 SEA SSS FUL L7 (MODIFIED ATTRIBUTES)
L12          14 SEA SSS FUL L8 (MODIFIED ATTRIBUTES)
L13             STR L7
L14          26 SEA SUB=L11 SSS FUL L13 (MODIFIED ATTRIBUTES)
L15             STR L8
L16          14 SEA SUB=L12 SSS FUL L15 (MODIFIED ATTRIBUTES)
L17          39 SEA ABB=ON  PLU=ON  L14 OR L16

     FILE 'CAPLUS' ENTERED AT 12:18:25 ON 20 FEB 2008
L18          39 SEA ABB=ON  PLU=ON  L17
L19          37 SEA ABB=ON  PLU=ON  L18 NOT L4
L20          37 SEA ABB=ON  PLU=ON  L19 AND PATENT/DT
L21          29 SEA ABB=ON  PLU=ON  L20 AND (PY<2003 OR AY<2003 OR
                PRY<2003)


     FILE 'MARPAT' ENTERED AT 12:25:04 ON 20 FEB 2008
L24             STR L13
L25          14 SEA SUB=L11 SSS FUL L24 (MODIFIED ATTRIBUTES)
L26             STR L15
L27          13 SEA SUB=L12 SSS FUL L26 (MODIFIED ATTRIBUTES)
L28          26 SEA ABB=ON  PLU=ON  L25 OR L27
                D QUE STAT

     FILE 'CAPLUS' ENTERED AT 12:27:44 ON 20 FEB 2008
L29          26 SEA ABB=ON  PLU=ON  L28
L30          24 SEA ABB=ON  PLU=ON  L29 NOT L4
L31          19 SEA ABB=ON  PLU=ON  L30 AND (PY<2003 OR AY<2003 OR
                PRY<2003)

     FILE 'MARPAT' ENTERED AT 12:28:52 ON 20 FEB 2008
L32          19 SEA ABB=ON  PLU=ON  L31
                D 1-19

     FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, WPIX, JAPIO, PASCAL, DISSABS'
     ENTERED AT 12:30:09 ON 20 FEB 2008
L33         918 SEA ABB=ON  PLU=ON  ("DESAI U"? OR "UMESH D"?)/AU
L34         238 SEA ABB=ON  PLU=ON  "GUNNARSSON G"?/AU
L35          46 SEA ABB=ON  PLU=ON  L33 AND L34
```

```
L36          22 SEA ABB=ON  PLU=ON  ((L33 OR L34 OR L35)) AND (?COAGULANT?
                OR ?COAGULAT? OR ?CLOTTING OR ANTICLOTTING OR ANTICLOT###)(
                10A)(?SULPHAT? OR ?SULFAT?)
L37           8 DUP REM L36 (14 DUPLICATES REMOVED)
                D 1-8 IBIB ABS

     FILE 'HOME' ENTERED AT 12:37:52 ON 20 FEB 2008
                D QUE L3
                D QUE L28

     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
     provided by InfoChem.

     STRUCTURE FILE UPDATES:   19 FEB 2008  HIGHEST RN 1004621-14-0
     DICTIONARY FILE UPDATES:  19 FEB 2008  HIGHEST RN 1004621-14-0

     New CAS Information Use Policies, enter HELP USAGETERMS for details.

     TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

       Please note that search-term pricing does apply when
       conducting SmartSELECT searches.

     REGISTRY includes numerically searchable data for experimental and
     predicted properties as well as tags indicating availability of
     experimental property data in the original document.  For information
     on property searching in REGISTRY, refer to:

     http://www.cas.org/support/stngen/stndoc/properties.html

     FILE CAPLUS

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     FILE COVERS 1907 - 20 Feb 2008  VOL 148 ISS 8
     FILE LAST UPDATED: 19 Feb 2008  (20080219/ED)

     Effective October 17, 2005, revised CAS Information Use Policies apply
     They are available for your review at:

     http://www.cas.org/infopolicy.html

     FILE CAOLD
     FILE COVERS 1907-1966
     FILE LAST UPDATED:  01 May 1997 (19970501/UP)

       This file contains CAS Registry Numbers for easy and accurate
       substance identification.  Title keywords, authors, patent
       assignees, and patent information, e.g., patent numbers, are
       now searchable from 1907-1966.  TIFF images of CA abstracts
       printed between 1907-1966 are available in the PAGE
```

display formats.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

FILE MEDLINE
FILE LAST UPDATED: 19 Feb 2008 (20080219/UP). FILE COVERS 1949 TO DA

MEDLINE has been updated with the National Library of Medicine's revised 2008 MeSH terms. See HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS
FILE COVERS 1926 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1926 TO DATE.

RECORDS LAST ADDED: 13 February 2008 (20080213/ED)

BIOSIS has been augmented with 1.8 million archival records from 1926 through 1968. These records have been re-indexed to match current BIOSIS indexing.

FILE EMBASE
FILE COVERS 1974 TO 19 Feb 2008 (20080219/ED)

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

Beginning January 2008, Elsevier will no longer provide EMTREE codes as part of the EMTREE thesaurus in EMBASE. Please update your current-awareness alerts (SDIs) if they contain EMTREE codes.

For further assistance, please contact your local helpdesk.

FILE MARPAT
FILE CONTENT: 1961-PRESENT VOL 148 ISS 6 (20080215/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 2008004452 03 JAN 2008
DE 102006031314 03 JAN 2008
EP 1873224 02 JAN 2008
JP 2008001611 10 JAN 2008
WO 2008007169 17 JAN 2008
GB 2439172 19 DEC 2007
FR 2903012 04 JAN 2008
RU 2314304 10 JAN 2008

CA 2550557 14 DEC 2007

Expanded G-group definition display now available.

Effective December 15th the iteration and answer limits in MARPAT have increased from 100,000 to 200,000 for both on-line and batch searches. For more information on MARPAT search limits, type HELP SLIMITS at an arrow prompt.

FILE WPIX
FILE LAST UPDATED: 13 FEB 2008 <20080213/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE: 200811 <200811/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> IPC Reform backfile reclassification has been loaded to the end of November 2007. No update date (UP) has been created for the reclassified documents, but they can be identified by 20060101/UPIC and 20061231/UPIC, 20070601/UPIC, 20071001/UPIC and 20071130/UPIC. <<<

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
http://scientific.thomson.com/support/patents/coverage/latestupdates/

EXPLORE DERWENT WORLD PATENTS INDEX IN STN ANAVIST, VERSION 2.0:
http://www.stn-international.com/archive/presentations/DWPIAnaVist2_07

>>> XML document distribution format now available.
See HELP XMLDOC <<<

FILE JAPIO
FILE LAST UPDATED: 17 JAN 2008 <20080117/UP>
FILE COVERS APRIL 1973 TO SEPTEMBER 27, 2007

>>> GRAPHIC IMAGES AVAILABLE <<<

FILE PASCAL
FILE LAST UPDATED: 18 FEB 2008 <20080218/UP>
FILE COVERS 1977 TO DATE.

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION IS AVAILABLE IN THE BASIC INDEX (/BI) FIELD <<<

FILE DISSABS
FILE COVERS 1861 TO 1 FEB 2008 (20080201/ED)

FILE HOME